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Original Department.

Lecture.

CLINICAL LECTURE ON DELIRIUM TREMENS.

Translation from Dr. Benjamin Ball's work on "Mental Disease" (Paris, France), by Dr. Adele Gleason.

There is a pathological state situated, as it were, on the frontier of acute alcoholism and chronic alcoholism, and which resembles a bridge passing between the two great phases of alcoholic intoxication. It is delirium tremens, or trembling delirium—a grave affection, and one which seems to bear the same relation to ordinary alcoholism, that of aggravation, which acute delirium bears to the maniacal state.

Gentlemen, from the earliest times in medical history, drunkards have been cared for, and cases of delirium tremens have been observed. Hippocrates has certainly reported examples; Aristotle seems to have described the symptoms in Denis, of Syracuse, who had a bout of drinking lasting twenty-four days (a truly royal orgie). In fact, our predecessors of the last two centuries have left us observations which evidently relate to it. And nevertheless, the name is of recent date, and it is scarcely sixty years since the existence of an acute disease, offering a special pathology, has been recognized, and its origin established in alcoholic impregnation.

It was in 1813; the wars of Napoleon were in full activity, and contraband goods coming to the shores of England and to the nearer of the continental shores, and especially in the county of Kent were there enormous quantities of foreign alcohols. The maritime population of these parishes abused, consequently, the use of all the strong liquors, that they contributed to introduce into the country. Then it was that Sutton, who practiced medicine in those parishes, was struck by seeing that there existed among these people, and especially with the sailors, a sort of fever, accompanied by trembling, which was cured by opium, but aggravated by bleeding. To this special form of mania, he gave the name of *delirium tremens*, without attaching directly to these attacks the abuse of alcoholic liquors as a cause, as it is only aside from the work of Sutton that delirium tremens has been recognized as a thing by itself, as a special disease.

Six years later, Rayer published a memoir in which he traced those attacks to their real cause, and made the word *oïnomania*, which has not survived.

We come, then, to the works of Blake, Ware, Copeland, Calmiel, and several other authors, who make known the nature and symptoms of this affection.

In 1826, Dupuytren pointed out the nervous delirium of the wounded and those operated upon, which he regarded as a special state. We know to-day that these are simply cases of delirium with trembling, developed by an accident or wound in subjects addicted to the abuse of alcoholic liquors.

Finally, Gubler, and more recently MM. Motet and Magnan, have studied this question with great care, and it is to be found reviewed in the great medical encyclopedias published in France and Germany.

In our day it is invariably admitted that delir-

ium tremens is produced *a potu nimio*, or rather *a potu suspenso*.

But we may ask ourselves whether the alcohol is always of necessity the point of departure. Opium and prolonged intellectual exertion, have been accused, especially in young girls. Such, at least, is the result of the observations of Johnsen. But we should be very cautious in such cases, above all in the case of young Englishwomen; for alcoholism, little known with us among the women of the upper classes, is often met with in the best English society, the members of which have often in their bureau drawers a secret consolation, to which they have recourse in all the afflictions of life.

Let us cite on this point an observation of Rayer to how great a degree we must distrust appearances: A cook had been all day employed in cleaning out a bureau in which several bottles of cognac and kirsch had been overturned. Following this work she was taken with an attack of delirium tremens, which was attributed to the vapor of alcohol, for the sobriety of this woman was vouched for. But a week later she had a second attack, and this time they thought she must be dismissed. Some days later she was found dead drunk in the street. It is then perfectly allowable in practice to distrust appearances.

Following this rule, one is rarely deceived, if using the greatest care in observation. We will leave aside from this lecture all the cases, more or less authentic, which are not related to alcoholism, and we will occupy ourselves exclusively with those which recognize as their origin the intervention of this toxic agent. But at the threshold of the question, one of the most important distinctions becomes obligatory, and dominates the entire history of the disease.

The habitual use of fermented liquors causes a special predisposition, and in subjects this predisposed delirium may break out, either on the occasion of an unexpected accident, or from the suppression of the usual excitant. Hence, we must include among the causes of delirium tremens all those acute affections which may happen to alcoholics, more especially wounds, pneumonia, pleurisy, acute articular rheumatism, typhoid fever, scarlatina, and erysipelas, especially of the scalp. We must add to these the greater part of the causes of enfeeblement, such as inanition, suppuration, and even blenorrhagia, intellectual work, prolonged watching, venereal excesses, and keen moral emotions. Bennett, quoted by Tweedie, reports the case of a young man who, discarded by his father on account of bad conduct, was seized almost immediately by an attack of delirium tremens.

Such is incontestably one of the etiological forms of the disease: the gun is loaded, it is fired, but not by itself—there must be a shock to determine a discharge.

There is another etiological form in which alcohol itself is not sufficient. It is met with in all those men who are habitual tipplers, but so with discretion and without great cause for scandal; it is also met with among workmen who labor in courts where the atmosphere is charged with alcoholic vapors. In short, delirium may break out abruptly as a consequence of an orgie.

We must add, after the causes, certain general predispositions.

Let us cite age first. With men it is mostly from thirty to fifty years of age that the disorder breaks out. With women it is generally at the time of the menopause, the time in which alcoholic tastes usually develop.

The influence of the season is also to be noted. The heats of summer appear to be specially favorable. The enfeeblement of the general health appears to create an equally baneful predisposition in this respect.

But one of the principal factors is incontestably heredity. The descendants of alcoholics are always specially inclined to commit excesses, the consequences of which are not well born. There exists on this head a very marked difference in human races. Thus it is that in the extremes of Africa, the Hottentots, drunkards *par excellence*, are rapidly enfeebled by the use of alcohol. The Caffres and the Zulus resist much better. They also become intoxicated when they have occasion; but they are of a superior race, full of energy and intelligence and military qualities. We hence understand how they resist the effects of a poison which triumphs easily over inferior organizations.

There remains finally the influence of the suppression of the stimulation. Pointed out by Cumming and Blake, it has been controverted by Laycock and Anstie, but it is to-day universally admitted.

These etiological points once established, let us look at the evolution of the disease. These attacks are almost always announced by prodromi.

Delirium tremens has doubtless been seen to break out even in the course of a prolonged orgie, but it is well known that the first manifestation of the disease is precisely dipsomania, the desire for intoxication.

Thus it often happens that the debauch is an

effect, and not a cause. Cumming reports the saying of a young girl, who said of her father: "We always have warning when an attack is coming on, for he begins to drink and becomes ugly."

Among the prodromi of the attack some are physical and some psychological. Among the former, we cite, first, gastric troubles, pericardial distress, cephalalgia, vertigo, excessive perspiration, slight tremulousness of the hands and tongue, accompanied, sometimes, by a certain embarrassment in speech; and sensorial disorders, such as hyperæsthesia, and even hallucinations of sight. Finally, sleep is troubled, and if the patient escapes insomnia, he has nightmares and terrifying dreams.

The instability of character and nervous uneasiness are the principal psychical troubles that are observed at this period. There is often a profound moral depression, associated with a vague terror, of which the patient can not give the cause.

This painful state may last from a week to a fortnight; but at last delirium breaks out, and as the first and principal symptom, it presents absolute insomnia.

The physiognomy of the patient, much disturbed, indicates clearly enough the disorder of the mind; the haggard eyes, the wrinkled features, the expression of terror upon the whole face: he comes and goes, is agitated, and gives contradictory orders.

A psycho-sensorial phenomenon of the highest importance is added to these diverse troubles: there are hallucinations. They relate more especially to sight; the patient perceives climbing figures, fantastic objects, and above all, animals of all kinds and all grades. Sometimes, also, but less often, he experiences hallucinations of hearing and of touch. A patient, recently in the clinic, saw himself pursued, in his delirium, by flies, who stung him cruelly.

Hallucinations of sight, with alcoholics, predominate in obscurity; they are more marked at night than in the daytime, and even during convalescence, at the time when they seem to fade away, they reappear often when the patient closes his eyes.

Another characteristic of hallucinations in the alcoholic, is that they are almost always aggressive. The personages which surround them seem to menace them; dogs show their teeth, rats would bite them, flies sting them; and these intellectual phenomena are marvelously well united with creeping sensations, with burning and pains which they feel in the skin.

Another accident very frequent with all the insane, is well shown in this form of delirium; it is the fear of being poisoned, from whence often comes the obstinate sitophobia that is presented by some of these patients.

(*To be Continued.*)

COMMUNICATIONS.

BLOOD-LETTING IN THE OLD.

BY HIRAM CORSON, M. D.,
Of Conshohocken, Pa.

(*Continued from page* 262.)

On the 8th of June, E. S., aged 77, consulted me on the propriety of his being bled. The doctor in his neighborhood would not bleed any one. He complained that he could not sleep well; had an unpleasant feeling in his chest, was very costive, had flying pains through his body, and could not make much exertion for more than a few minutes at a time. His heart was beating irregularly—a few regular beats, then a pause, then several quick, rapid beats, or perhaps a renewal of the usual beats, with a pretty strong impulse against the ribs, but with no valvular difficulty. Some persons who are favorable to bleeding healthy people, are greatly afraid to bleed those whose heart now and then loses a beat, or has now and then fluttering, as they call it; but as I have often seen such persons bear the loss of blood very well, I did not hesitate here, as he had already tried purging and other home remedies. I bled him pretty freely, and he expressed himself as feeling easier in the chest. I stayed twenty minutes or more, and when I left he walked out with me to the carriage, and said he thought he felt better. He has since been much better than before his loss of blood. This irregularity of the pulse is regarded by many physicians as a condition which forbids the loss of blood, though there be serious disease elsewhere which might be relieved by bleeding or cups. I may therefore say here that I have frequently bled persons whom I knew to have that condition of the heart, without any injury. And two years ago my young friend Dr. Oscar Leedom bled me, then in my seventy-sixth year, moderately, for the relief of a pain over my right eye, which had been increasing for two days. It gave me entire relief in a short time.

The irregular action referred to above—losing a beat, sometimes five or six of them, in a minute, and sometimes not one for hours, or perhaps days

—has been going on with me for many years; and yet I did not fear to be bled, and it relieved me, after bromide of potassium and nervines had failed, and digitalis could promise no relief for many hours, if at all. Why, then, should I have dallied with them, when there was at hand a speedy, safe, efficient remedy?

January 2, 1876, while in attendance at the house of John Rex in Philadelphia county, his mother-in-law told me that she had had for a couple of days a dull, heavy feeling in the forepart of her head, and wished to know if I did not think bleeding would relieve her; that she had been bled frequently, but not during the last several years. I suggested that she take a mild cathartic, and if she should not be better when I should make my next visit, I would bleed her. On the 4th I was there again, and as she had had no relief concluded to bleed her. On pushing up the sleeve of her dress, I found an arm so thin and wasted as surprised me; and on looking at the back of the hands, the skin was so thin and silky-looking, with brown spots and blotches here and there, that I knew at once she must be quite old. Every tendon and vein could be seen almost as plainly as if there had been no skin over them. Every physician of long practice has seen such hands, but never save in very old people. For a moment I was doubtful if I should go on, and on asking her age, she said: "If I live till September I will be ninety-one (91)." This was a surprise to me. She saw it, and immediately said, "I am not too old, am I, to be bled?" "No, it will relieve your head." I thus reasoned the case with myself: Here is a woman who is generally well, but very old, takes but little exercise, and now has symptoms which, in persons of even fewer years, have in thousands of cases heralded the coming of paralysis or apoplexy. What the precise condition of the brain is I do not know; but it may be a local congestion which may be relieved by taking from her arm, while in a sitting position, a few ounces of blood. A few ounces may do, in this old woman what could only be effected in a strong, healthy one by from a pint to a quart. I have so often removed such symptoms, and averted, as I believe, attacks of palsy by a timely bleeding, that I think it much safer to bleed her than to omit it. She was bled nine ounces, without feeling faint. Two days later I was there again, and on asking her how she felt, she said: "I am perfectly well now. I felt it do me good before you left the house." She continued well until last fall, when she died after a brief illness, in her ninety-sixth year. This case will be regarded as evidence of my recklessness. Let us now suppose that all these cases would have done well without any medication, or, even go further; under treatment by the opponents of blood-letting—those teachers who tell the students that patients have no blood to spare—what then do they prove? That it is a most harmless measure; that people can "spare" a few ounces of blood without danger; and that young men who graduate in medicine without knowing this are unfit to practice medicine, and that their teachers have failed to perform their whole duty.

I may here say that all the persons spoken of here as having been bled from two to six years or more ago are now living, save the one who died in her 96th year. Mrs. Cline is in her 91st year; another in his 78th; myself in my 80th; Mrs. W. in her 68th; Mrs. N. J. in her 71st, and S. G. in his 71st. I might add scores of cases of old people bled by me during a practice extending over fifty-five years, and all with relief, so far as my memory goes. If the testimony of those, even in a single county, who have long practiced, could be published, what an array of proof we would have of the value of blood-letting in saving life in cases of apoplexy, pneumonia, pleurisy, peritonitis, and in averting death in threatened attacks of paralysis in old people.

As this is an important subject, and as in the diseases which I have named and in some others where it is so efficient, the teachers in our two great medical schools are denouncing blood-letting, talking about the blood being the "organ of life" and not a drop should be lost, thus filling the students with dread, I feel that it will be proper to refer your readers to the valuable paper on this subject, written by Dr. Joseph Stubbs, of London Grove, Pa., published in the REPORTER of July 8, 1882. Every student of both medical colleges should read it, as should also the students of the Woman's Medical College. Should they do so, we might hope, hereafter, that pneumonia would not sweep off our eminent medical men and other valuable citizens, as it has done for the past few years, under a treatment as much to be feared as the disease itself.

Dr. Stubbs writes: "Second month, 26th, 1881, I was called to see Dr. Ezra Michener, who gave me the following history: 'I am now in my eighty-seventh year. Five days ago I fell on the ice, and sustained a fracture of the humerus near its upper extremity. There was no displacements, and it appeared to be doing well. Last evening I was quite chilly, without sensible cause, had tenderness and aching in submaxil-

lary glands, more marked on the tonsils. On retiring, the signs of the evening had passed away, and were replaced by others of a graver character. I now had pronounced fever, with weight and a burning sensation in the right thorax. The breathing was oppressed and hurried, more so when lying down. These symptoms were persistently aggravated during the night.'

"I found him with a dry, hot skin, pulse frequent and feeble, or rather oppressed, breathing short and oppressed, with pain increased by cough, or attempting to draw a full breath. My diagnosis was pneumonia, to which conclusion he arrived. I said to him: 'Doctor, notwithstanding your views in reference to blood-letting, you would not advise it here on account of your age. You are too old to be bled.' The prompt reply was: 'That must be tried. I do not know that age should make any difference. If I have but a little quantity in store, a proportionate quantity should afford relief, especially now, while in the congestive stage. If thee does not wish to use the lancet, I shall be obliged to use it myself.'

"He was bled while sitting up, and when he drew the first free breath, the blood was stopped. On recurring to the vessel, it was found to contain ℥xv. of blood. . . . I had no case left to report. The disease was *suddenly* and completely aborted, and required no more attention."

Such is an abridged history of the case reported by Dr. Stubbs. And how instructive! A man 85 years of age, with a fracture of the arm of five days' standing, attacked by the disease which has, within a few years, swept away from us a host of our eminent men, all much younger, with an illness of only a few days, their death-beds surrounded by eminent physicians busy in diagnosing the disease, earnest in declaring it *typhoid* pneumonia, and on that account feeling justified in not resorting to that means of relief which has saved thousands from premature death. Typhoid indeed! I know no typhoid pneumonia—never recognize such a disease. What was Doctor Michener's "pulse frequent and feeble, or rather oppressed; breathing short and oppressed"?

Now suppose one of the enlightened physicians of the times had been there, and prescribed one of these "heart tonics," or some one of the new specifics to bring down the pulse, allay the heat, and thin or thicken the blood, as some great German experimenter may have suggested for such a case; what, after this, would have been his situation in a few hours? It would have been one of those cases called typhoid, which they would not expect to cure in so old a man, and which for them would justify the use of this or that, to see how it would act. Of Dr. Michener's case, Dr. Stubbs says:

"It presents three striking features:

"1. A rapid and extensive congestion of the lung.

"2. A high grade of morbid action tending to destruction of important vital tissue.

"3. A sudden and complete arrest of the disease by blood-letting alone."

Let no one fail to read Dr. Stubbs' whole account of his case. In order to have the opinion of Dr. Michener on the subject of bleeding aged people, I wrote to him in relation to it. To-day, December 21, 1883, I received a reply from which I copy the following:

"I have repeatedly used the lancet in persons varying from 75 to 80 years, with equal advantage as in those of younger years. Some of them were cases of bastard pneumonia—*peripneumonia botha* of authors—in which I have found it to afford very prompt relief, showing that the imminent danger of suffocation is caused by congestion of blood in the pulmonary tissues, rather than by serous effusion into the air-cells of the lungs. The latter appears to be a mere sequence of the former.

"While on this subject, I will relate another form of disease in which I have used the lancet most happily under very adverse circumstances, surely, if modern teaching be true. I will give one case. John Mull, an industrious and healthy farmer, who had recently become intemperate—after several days of extreme exposure to wet, cold, and to whisky—returned home sick on the 25th of 3d month, 1829, and went to bed, where he laid without medical attendance or much nursing. On the first of the ensuing month, I was called to him. As I approached the house, his loud, stertorous breathing was quite audible in the public road. I found him profoundly comatose, the extremities cold, stiff, and pulseless; mouth and eyes set wide open; the respiration not more than five or six. I had a year before treated an analogous case, and the result led me to adopt a similar course. While hastening the preparation of more general and warm stimulating appliances, I at once placed the hand and arm in pretty warm water, with active bathing and frictions till it became more warm and supple, and then applied the lancet. A single drop of thick, pitchy, black blood followed the blade; as the frictions were continued, there was another and another at shorter intervals, each successive portion becoming more fluid and less pitchy till it

flowed, a stream of blood. When the blood had reached six ounces, there was a very obvious change in his condition, and at 12 ounces he was quite cognizant, and the bleeding was stopped. I only state the facts of the case, leaving others to draw their own conclusions. Convalescence was speedy and complete.

The other case mentioned scarcely differed save in the name. Such is the report of Dr. Michener, a man of unimpeached truth and integrity, when speaking of things

> "All of which he knew,
> And part of which he was."

Shall we listen to French and German teachers, of whom we have no knowledge, and shut our ears against Prof. S. D. Gross, Drs. Michener, Atlee, Green, and Benjamin Wilson, our own men, who have spoken to us words of truth and earnestness, in praise of blood-letting as a safe and efficient remedy for that disease which has been recently so fatal in our profession?

COD LIVER OIL AS A SURGICAL DRESSING.

BY J. E. HAINLINE, M. D.,
Of Cantril, Iowa.

Through the columns of your valuable journal I desire to call the attention of the profession to the use of cod liver oil as a surgical dressing.

The knowledge I am about to communicate is based upon actual practical experience, and the oil used the *purest* to be found in the shops.

In 1875 I was consulted by a lady, who told me she had a large tumor in the left mammary gland which was causing her considerable anxiety. Her friends told her it was a cancer, and that she ought to have it attended to at once. After thoroughly examining the tumor I told her it was malignant in its nature, and that the better plan would be to have it removed by the knife. This she concluded to have done. I gave her about two weeks' preparatory treatment, and then, with the aid of my two colleagues, removed the tumor, together with several axillary glands. After securing several small vessels and thoroughly sponging the wound, closed the same with several sutures (silk) and a few small strips of adhesive plaster, after which I applied the simple water dressing, allowing it to remain undisturbed for forty-eight hours. I then removed the dressings, found the wound doing nicely, and then I applied the cod liver oil dressing. This I did once a day, always cleansing the wound first with castile soap and warm soft water. On the sixth day the wound was torn open by the patient while about half asleep. I had neglected to pinion the hands to prevent her scratching. She said "the place" had been itching terribly, and she had attempted to scratch, and in so doing had torn it. I found there was an opening about three inches long by one and a half wide. This I determined to heal by granulation, and thereby prevent deformity of the breast. The wound was quite deep. After cleansing it thoroughly, I applied the cod liver oil, to which I had previously added a few drops of carbolic acid. The wound healed rapidly, and the granulating process was perfect in every respect. The patient made a rapid recovery, and up to the present writing there has been no return of the disease. The diagnosis was "*encephaloid carcinoma.*"

The dressing in this case being a new feature, I determined to examine several surgical works for the purpose of obtaining, if possible, some evidence of its previous use. I did so, and not finding a single instance, I concluded *I* must surely be the originator.

I addressed Prof. S. D. Gross, and laid the above case before him, at the same time asking him if *he* had ever used the above-named dressing, or had ever known of its being used by any surgeon.

I received a prompt reply from Dr. Gross, stating that he "had had no experience with cod liver oil as a surgical dressing," but advised me to continue my experiments, noting carefully the results, and report the same.

These experiments embrace a class of cases differing entirely from each other. In every instance the dressing seemed to increase activity, thereby promoting the healing process.

To enumerate and describe all the cases in which I have used this dressing would require too much valuable space in your journal, so I will only mention a few in connection with the one above cited.

In the spring of '76 I excised a scirrhus breast, after which I applied, first, the simple water dressing, allowing it to remain 36 hours, after which I applied the cod liver oil dressing, to which I added daily a few drops of carbolic acid.

The wound healed rapidly, and on the sixteenth day my patient returned to her home, with instructions to report to me at my office once per week, and to apply the dressing as she had seen me do. I also prescribed an alterative mixture to be taken an hour after meals.

When my patient left for her home the wound was nearly healed, and when she returned a week

later, it had entirely closed. Up to this time there has been no return of the disease, and the lady to-day is enjoying pretty good health.

Three years ago I operated upon a young man 23 years of age, for necrosis of the tibia. I removed a large portion of dead bone, and, after scraping the cavity, carefully filled it with surgeon's lint, which had been previously dipped in a solution of corrosive sublimate. This I permitted to remain for 24 hours, when I removed the same, cleansed the cavity thoroughly, and again introduced the lint, this time saturated with the cod liver oil and carbolic acid.

In this case, also, I prescribed an alterative mixture combined with tonics. In no case where I have operated, using the above-named dressing, did there occur a more perfect and rapid recovery than in this particular one.

Desiring to know the condition of my patient at this time, I wrote him and received the following reply:

"In regard to my leg, I will say it has given me no trouble for nearly two years. I have been working at my trade this winter (he is a blacksmith), and have been on my feet a great deal; but my leg has not hurt me, and seems as strong as ever it did."

Thus I might go on citing over a hundred different cases in which the cod-liver oil, with the addition of carbolic acid, was the only dressing applied; but will be content, for the present, with those above mentioned.

In every case I was compelled to note the increased vitality.

My experience with cod liver oil as a surgical dressing has led me to use it exclusively, believing it to be superior to the olive oil generally used.

To those who may desire to test the virtues of this new dressing, let me suggest that they use the *purest article to be found in the market.*

FRACTURE OF THE FEMUR IN CHILDREN.

BY D. B. HOLSBURG, M. D.,

Of Granville, Ill.

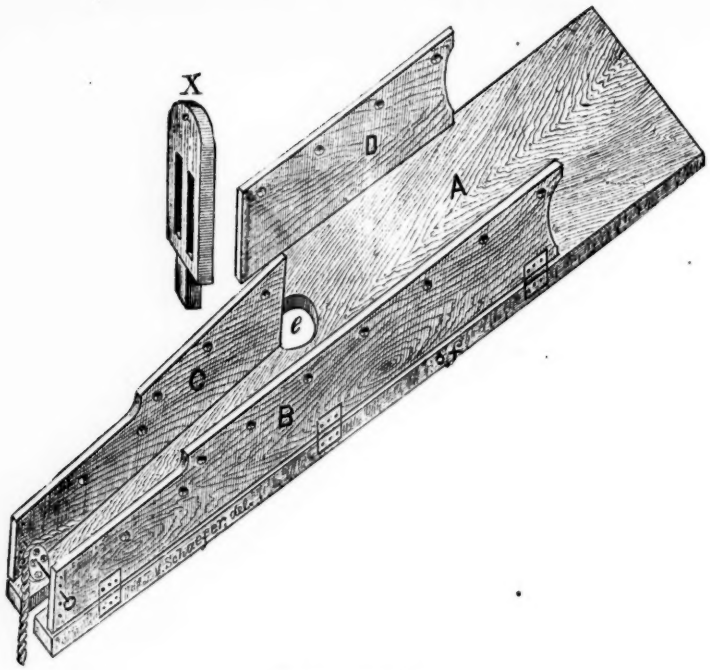
Every practitioner is aware of the difficulties attending the treatment of fractures in children, and more particularly those of the femur in its upper third. In adults almost any of the ordinary modes of dressing may give satisfactory results; but in children, who look upon the doctor as a sort of tyrant, and all modes of confinement as punishments, it becomes necessary to combine comfort, adaptability, and control, with what is used as the best and safest dressing. The following narrative of a case and the apparatus used in the treatment of it, and others of the same nature, may perhaps be suggestive:

T. K., three years old, child of a farmer, accidentally fell from a two-seated buggy while the vehicle was in motion, and occupied by four persons besides the little unfortunate. The hind wheel, rising from a rut six or eight inches deep, struck the child's thigh as high up as the upper third of the femur, and a severe injury was the result, of course.

I reached the patient's house about three hours after the occurrence, found the child crying violently, the left foot everted, and the seat of injury in a very much swollen and ecchymosed condition. Indeed, so much swollen were the parts that it was impossible to determine whether the fracture was of a simple or comminuted nature. After applying a temporary dressing, and ordering a lotion with lead-water and laudanum, the child was left in care of the parents, to be seen again next morning and a permanent dressing applied.

A ride of seven miles afforded time for thought, and visions of "Cowling's Aphorisms" and plaster of Paris dressing flitted through the mind. An extended modification of the common fracture-box suggested itself as the best apparatus for treating the individual case, and, accordingly, early next morning a mechanic was called on, a rude drawing made, and a box constructed, of which the annexed figure, with perhaps a little explanation, will convey the idea. Next morning found the swelling considerably subsided; a few whiffs of chloroform were administered, and a simple fracture of the upper third of the femur was diagnosed. The next step was to apply plaster of Paris dressing. This done, a soft bed quilt was folded and laid in the box referred to, and our boy deposited and secured therein, taking pains to pack the leg with cotton on the outside of the plaster of Paris dressing, to guard against eversion and inversion. The perineal band was used to prevent slipping down in the box, but applied only when the plaster was partly set, thus causing no inconvenience whatever.

In ten days the boy sat up in the box, which was set on two chairs before a window, and played with his toys, perfectly contented. Even from the first day, he was carried to any part of the house, as well as put to bed, always in his box. At the end of six weeks he was liberated, and removal of the dressing showed good union; no shortening; the foot at a natural angle, and but slight bowing of the bone. The dressings were changed



DESCRIPTION OF BOX.

A is a plain board, even with the patient's head at its wide end, and extending six or eight inches beyond the foot at the other end, for the purpose of extension. *B* is a gate extending from the axilla to the foot end of *A*, to which it is attached with hinges; being perforated with the holes near the upper edge, for the purpose of securing the patient by means of strips of muslin passed to corresponding holes in gate *D*. *C*, also a gate on hinges, and perforated correspondingly with that part of *B* opposite. *D*, a gate on hinges, extending from axilla to offset at *E*, perforated to range with *B* on opposite side. *E*, aperture for chamber vessel. *F*, screw-eye for perineal band. *G*, pulley or spool on wire passed from *E* to *C* for cord with weight. A foot-board, *X*, may or may not be used. The apparatus is best made of poplar wood, as it holds screws better than other light woods.

three times during the treatment; the limb being carefully sponged with lukewarm water each time. It need hardly be mentioned that the uninjured leg was perfectly unconfined, being of course favored with freedom of motion only in so far as the recumbent position and the general situation might allow.

Now, the advantages of such an apparatus are:

1. Simplicity and ease of construction.

2. The persons in attendance can move the patient without risk of displacement of the fractured parts, thus overcoming the monotony of close confinement.

3. The patient can be laid on either side, and thus gain the benefit of change of position and prevent bed-sores.

4. The patient can attend to calls of nature without removing the box or using a bed-pan.

HOSPITAL REPORTS.

BELLEVUE HOSPITAL, JANUARY 5, 1884.

Reported by J. H. WOODWARD, M. D.

(*Continued from page* 268.)

Case 2. Gun-shot Wound of Thorax—Non-penetrating.

Alexander K——, aged twenty-nine years, admitted to Ward 9, December 21, 1883.

A short time before his admission to the hospital the patient had been shot in his chest. The wound of entrance was found two inches below the right nipple. Another wound was discovered in the areola of the left nipple, through which, the patient stated, some physician had extracted the ball. This wound had been closed with a suture of coarse silk, which was removed at once. After the patient reached the ward, his wound was not probed. There were no signs of injury

to the thoracic viscera. Patient's general condition good.

The wounds of entrance and of exit and their vicinity were washed with $\frac{1}{2000}$ solution of corrosive sublimate. A short drainage tube was placed in the wound of entrance, but none could be passed into the wound of exit without doing some violence to the tissues, and that wound was not drained. Both wounds were finally syringed with the solution of corrosive sublimate; and iodoform was then dusted upon them. Carbolized gauze and borated cotton composed the dressing.

December 22. No temperature. No chest symptoms. Learned that the bullet was a thirty-eight calibre.

December 24. Renewed the dressing, under irrigation with the sublimate solution. Discharge small in amount. General condition normal.

December 26. Removed the drainage tube. No tenderness along the track of the ball. Redressed as before.

December 28. The wound has healed perfectly. A small superficial ulcer remains at the wound of entrance. Covered that with rubber plaster, and discharged the patient cured.

Before giving the details of the following cases of abscess, it will be advisable to describe the surgical treatment which they received, for they were all managed in the same general way. In the first place, the region where the incisions were to be made was shaved and scrubbed with soap and water. It was then washed with ether and a five per cent. solution of carbolic acid; and finally, it was irrigated with a $\frac{1}{2000}$ solution of corrosive sublimate in water. The hands of the operator were cleansed and disinfected with carbolic acid. The syringes and instruments had been rendered thoroughly aseptic, and the drainage tubing had been soaking in $\frac{1}{20}$ carbolic solution for weeks. After the irrigation had been begun, the abscess was opened and the wound was constantly irrigated until iodoform had been sprinkled upon it.

Antiseptic precautions were as carefully observed as if the case were one of amputation through the thigh.

Case 1. Isaac H., age 34, admitted to Ward 8, October 11, 1883.

Patient states that his trouble began three months ago, when he received a blow on the left side of his face. His neck began to swell soon after the injury, and became red and painful. He applied poultices. Examination on admission revealed a large fluctuating tumor of the left side of patient's face and neck. Temperature not taken.

October 12. An incision was made about two inches above the clavicle, at the most dependent part of the abscess, penetrating the deep cervical fascia. Pus in large amount flowed from this wound. The abscess was not washed out. A large rubber drain was passed into the abscess cavity. Iodoform, mineral wool, and borated cotton, comprised the dressing.

October 13. Redressed under the irrigator. The mineral wool had failed to absorb the pus. Iodoform, carbolized gauze, and borated cotton, were used for the dressings.

October 16. Drainage tube removed. Induration much diminished. Redressed as before.

October 18. Removed the dressing and found that there remained only a small ulcer. That was dressed with iodoform and rubber plaster.

October 23. Patient discharged cured.

Case 2. Bernard A., 29 years. Admitted to Ward 10, November 24, 1883.

One week before admission the left side of patient's face began to swell. The swelling was painful, and during the last twenty-four hours patient had suffered from dyspnœa and dysphagia.

November 25. The abscess was opened and a rubber drainage tube inserted. A dressing of iodoform, carbolized gauze, and borated cotton, was applied.

November 27. Redressed the case as before.

December 1. Removed the tube and dressed the case as before.

December 8. Discharged the patient cured.

Case 3. Levi S., admitted to ward 10, December 27, 1883.

No history. He presents a large, red, indurated and fluctuating swelling of the left side of his face and neck. Temperature 102.

December 28. Opened the abscess, inserted a drainage tube, and dressed with iodoform, carbolized gauze, and a saw-dust bag, which had been rendered antiseptic with a solution of carbolic acid in alcohol, $\frac{1}{8}$.

December 30. Redressed. The saw-dust had not possessed any special advantages over the carbolized gauze as an absorbent. Drainage tube removed. Dressed with iodoform, carbolized gauze, and borated cotton.

January 1. Redressed. No discharge. Iodoform and rubber plaster.

January 8. Discharged cured.

Case 4. Patrick L., 47 years, admitted to Ward 10, January 15, 1884.

Patient states that about five weeks ago he had erysipelas in his right foot, and that about five weeks ago a painful, red swelling appeared on the right side of his neck. He was treated with salves, etc., prior to admission.

Examination reveals a red, fluctuating swelling of immense size, on the right side of patient's neck. The swelling begins below the clavicle in front, and extends to the inferior angle of the scapula behind. Patient is very weak, has a high fever, and his skin is wet with a clammy perspiration.

The abscess was opened at a point behind, over the spine of the scapula. The wound was a pretty deep one. Through it about thirty-two ounces of pus flowed, and the abscess was considerably diminished in size. The integument about the clavicular region was quite thin, but it was deemed advisable to allow the abscess to drain through the opening in the back. A large rubber tube was inserted into the abscess cavity. Iodoform, carbolized gauze wet in $\frac{1}{10}$ carbolic solution, and borated cotton, composed the dressing, which was large and thick. It was held in position by carbolized bandages, and over them a rubber bandage was passed to prevent the dressing from slipping. Ordered whisky ℥ ss, quiniæ sulph. gr. iij, and tr. ferri chloridi gtt. x.; q. 4 h., day and night.

January 16. Pus has appeared through the dressings. Re-dressed the case under the irrigator. The first dressing was saturated with pus. Iodoform, carbolized gauze, a large disin-

fected saw-dust bag, and borated cotton, comprised the dressing, which was secured by the rubber bandage. Ordered tr. digitalis gtt. x., t. i. d.

January 17. Temperature normal. Patient sweating profusely. Increased the whiskey to ℥j. t. i. d. Opened his bowels with calomel.

January 19. Re-dressed the case as before, and found the dressing saturated with pus. The saw-dust bag had not absorbed the discharges so well as the carbolized gauze. Regular dressing of iodoform, carbolized gauze, and borated cotton applied. Ordered aromatic sulph. acid, gtt. xv., q. 4 h., to check profuse perspiration.

January 20. Patient is better; sweating less profusely.

January 21. Had temporary retention of urine this morning. Increased the dose of the aromatic sulphuric acid to gtt. xxx., and added tr. belladonna gtt. v., t. i. d.

January 22. Discharge through the dressing. Washed the abscess cavity thoroughly with solution of bichloride of mercury $\frac{1}{2000}$, until the water came away clear. Inserted a smaller drain, and dressed the case as before.

January 23. Discharge of serum through the dressing this morning. The soiled spot was dusted with iodoform and covered with borated cotton.

January 29. Removed the drainage-tube, and redressed the case as before, omitting the rubber bandage.

February 1. The abscess has healed completely, and requires no further attention.

Case 4. John D., age 6 years, admitted to Ward 7 on December 31, 1883.

Patient presented a large fluctuating swelling over his trachea. This swelling had begun three days earlier, and had increased rapidly in size until it was quite large. An incision was made over the upper part of the sternum, through the skin and superficial fascia. Through this about eight ounces of curdy pus flowed. A rubber drain was placed in the wound, and the usual antiseptic dressing was then applied.

January 1. Redressed the case as before.

January 4. Redressed again as before. Ordered syr. ferri iodidi and cod-liver oil.

January 10. The abscess has entirely healed, and patient is in much better condition than when admitted. He was under observation for one week longer, but no sign of return of suppuration in his neck having appeared, he was discharged cured.

Case 5. Susie H., aged nineteen months.

The mother stated that the patient had been sick for five weeks, and had been treated for malaria during that period. She had noticed a short time before she brought the child to the hospital that the patient was very tender about the left lumbar region. When presented, the patient was pale and anæmic; and in the left lumbar region there was a tense swelling, in which fluctuation was detected after careful examination. A hypodermic needle was passed into the tumor and the presence of pus demonstrated.

The abscess was opened at once and a large quantity of healthy pus liberated. A rubber drain was used and the usual dressing of iodoform, carbolized gauze, and borated cotton applied.

December 15 and 17. Case dressed.

December 20. The tube was removed.

The case was discharged cured December 28.

Case 6. Mary H., aged twenty-two years, admitted January 7, 1884.

Patient says that her child died three weeks ago, and that soon after her right breast became swollen, red, and painful. She poulticed it. When admitted, her breast was red, indurated, enlarged, and painful. The presence of pus was determined by the introduction of a hypodermic needle. The abscess was situated in the glandular structure.

January 9. An incision was made on the under surface of the breast and carried carefully through the skin and peri-glandular structure until pus was detected. This wound opened a cavity in the substance of the gland, containing about six ounces of pus. A second abscess was located with the hypodermic syringe, and it was opened in a similar manner. This abscess was above the plane of the nipple in the glandular tissue, and contained about eight ounces of pus. The septum between the two abscesses was one-fourth of an inch in thickness; and, although it was deemed desirable to drain the abscess through the lower wound, if possible, the danger of hemorrhage caused the operator to refrain from puncturing the septum. Both cavities were thoroughly washed with $\frac{1}{2000}$ solution of corrosive sublimate. A rubber drain was inserted into each, and iodoform was sprinkled upon the wounds. A large dressing of carbolized gauze wet in $\frac{1}{40}$ carbolic solution, and borated cotton, was applied; and its margins were secured by means of a rubber bandage in addition to the ordinary bandaging. In the evening she had a temperature of 103½°. But her temperature fell to normal within an hour after the administration of liq. morphiæ U. S. P., ℥j.

January 10. Redressed under irrigation. No pus in the dressing. Removed the tube from the lower abscess cavity, and substituted a small tube for the large tube in the upper abscess. Applied the same antiseptic dressing.

January 15. Redressed the case and shortened the tube.

January 18. Redressed the case again and removed the tube. There was no induration about the breast. Patient is allowed to go about the ward.

January 22. The case has healed throughout, with the exception of two small superficial ulcers. There is no induration at any point. The ulcers healed rapidly, and the patient was discharged cured, having been under observation a number of days after the abscesses had healed. The scars were the only evidence that she had ever suffered from disease of the heart.

Chancroids and Bubo—Extirpation of the Inguinal Glands.

Lydia B., age 17, single. Admitted October 22, 1883. When admitted, the patient had large chancroidal ulcers at the posterior commissure of the vulva, and on the labium minorum. The lymphatic glands of the left inguinal region were already enlarged, tender, and painful. The chancroids were cauterized with fuming nitric acid and dusted with iodoform. Tincture of

iodine was painted upon the bubo. Ordered two carbolized vaginal douches per diem.

November 2. The chancroids have been cauterized every second day since the last note, with fuming nitric acid, and iodoform has been dusted upon them twice daily. The ulcers are healing, but the bubo is enlarging and suppuration is impending. Substituted for the tr. iodini:

℞. Unguent iodini comp.
Unguent belladonna, āā ℥ ss.
S.—To be applied t. i. d.

November 7. Continued the same treatment until to-day. Instead of nitric acid, a solution of carbolic acid one part, in glycerine four parts, is used to cauterize the chancroids. They are dusted with iodoform as before. The glycerine and carbolic acid are applied once every day.

November 13. The chancroids are healing satisfactorily. The bubo is increasing. Applied sponge compression to the bubo.

November 16. The bubo is red and very large. It was aspirated with a hypodermic syringe, and pus withdrawn. Fifteen minims of pure carbolic acid were injected at the site of the suppuration.

November 17. Injected $\frac{1}{6}$ gr. of bichloride of mercury and five minims of carbolic acid in glycerine q. s. into various portions of the bubo. The remaining treatment is the same as before.

November 18, 19, and 20. Same treatment continued.

November 21. Aspirated ℥ ij. of pus from the bubo, and injected $\frac{1}{4000}$ solution of corrosive sublimate. This treatment was repeated, with some apparent improvement in the bubo.

November 27. Injected iodoform gr. xv. into the tumor.

November 29. Repeated the injection of iodoform.

December 1. The bubo is very large, and there are several points of fluctuation. The chancroids are nearly healed. They are dusted with iodoform twice a day. Stopped all treatment of the bubo by injections, but applied ice to limit the inflammation as much as possible.

December 8. Chancroids have healed.

December 10. Anæsthetized the patient, and Dr. McBurney operated upon the bubo. But before the operation was begun, both inguinal regions and the mons veneris were shaved and scrubbed with soap and water. The left groin was then washed thoroughly with solution of bichloride of mercury $\frac{1}{2000}$. The operation was then begun, and the wound was frequently irrigated with the bichloride solution. It is unnecessary to state, perhaps, that every detail in the antiseptic management of the case was carefully attended to. During the operation several abscesses were opened, and the wound was contaminated with pus. When the glands had been removed, there remained a wound five inches long by three inches broad, which extended down to the fascia covering the deep blood-vessels. This wound was closed with catgut continuous sutures, and a small rubber drain was used to carry off the serous discharge. Iodoform and protectives were applied to the wound, and a dressing composed of carbolized gauze and borated cotton were fastened upon the groin by carbolized bandages. A rubber bandage was passed over all, to hold the dressing securely in position. The patient was put to bed with the thigh semi-flexed upon her abdomen.

December 17. Changed the dressing for the first time to-day. The wound had united by primary union throughout, excepting at two or three points where there was superficial sloughing of the skin, due to tension. Shortened the drain. Redressed as before.

December 26. Changed the dressing for the second time. The wound is perfectly solid throughout. A small sinus only remains where the drainage tube passed. Inserted a short tube into it to keep the mouth open. Balsam of Peru, carbolized gauze, and borated cotton.

January 3. Removed the dressing and found the case had healed perfectly. During the progress of this case, the patient had had no febrile movement after the second day, and her temperature never rose to 101° at any time. The scar is narrow and in the fold of the groin, and is scarcely noticeable. It should be stated that throughout the entire management of the wound in this case the strictest antiseptic precautions were observed.

Medical Societies.

COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting December 5, 1883.

Dr. Charles W. Dulles, Surgical Registrar to the Hospital of the University of Pennsylvania, read a paper entitled,

Criticisms on the Specific Theory of Hydrophobia,

Nearly two years ago I had the painful experience of being summoned one day to take charge of a boy who was suffering with what is called hydrophobia. The unfortunate patient was under my care and observation less than twelve hours, when he died. The horrors of that day can only be understood by those who have had a similar experience. To stand in the presence of such distressing psychical disturbance, to see death advancing relentlessly, to feel that science furnishes no satisfactory explanation of the nature of the disorder, and offers no trustworthy remedy for its treatment—this was a trial of mind which intensified the weariness of body which the circumstances necessarily entailed. The details of the case were read before the West Philadelphia Medical Society, and are recorded in the *Medical News*, May 27, 1882. There can be found all the points which at the time most impressed me. There, too, are recorded the theoretical and practical notions in regard to hydrophobia which I had at that time. Later, on May 23, 1883, I read before the Philadelphia County Medical Society a paper entitled "Remarks on Hydrophobia," which was published in the *Philadelphia Medical Times*, August 11, 1883. In this are set down some of the conclusions which I had reached after more than a year's study of the literature of the subject. The point aimed at in that communication was to attract the attention of those who heard me to the extremely unsatisfactory condition of our knowledge in regard to this disorder, and to lodge in their minds the sus-

picion that the views so ordinarily held, and so positively stated in most of the text-books, are not as clearly established as most people believe. In concluding the discussion which followed in the Society, I stated all I wished to, at that time, of my own convictions, in the expression that "but little of the evidence upon which it (the commonly accepted theory of hydrophobia) rests, can be regarded as having *an accuracy and reliability commensurate with the delicateness and gravity of the questions at issue.*" Since then I have continued my investigations, and the wider their extent has grown the firmer has become my belief that this statement was the very mildest that could have been used without sacrificing the truth. But I have learned by reading, and by experience, that those who differ from the majority are in danger of being treated to a certain amount of disdain, for their inability to accept as evidence what to others seems acceptable enough. For example, Dr. Parry, in his interesting work on *Cases of Tetanus and Rabies Contagiosa*, published in London, 1814, indicates his sentiments as follows: "It was formerly doubted whether any such disease as canine hydrophobia existed; and I have heard that the question was once solemnly debated in a society, which, after a long discussion, determined it in the negative by a majority of voices. The existence of the giraffe or camelopardalis, was long denied by the moderns, not only notwithstanding the accounts given of it by the ancients, and its delineation on the Prænestine pavement, but after its skin was actually to be seen dried and stuffed in a Dutch museum. We are told of a king of Siam, who, after he had heard with patient attention certain wonders from an European ambassador, and was at last informed by him that in this country, at certain seasons of the year, water became solid, and was capable not only of being cut or broken, but of admitting his majesty and his whole court to walk over it without wetting their feet, flew into a violent passion, exclaiming: "For a long while, notwithstanding the prodigies you have related to me, I thought you were an honest man; but now I am sure that you are an impudent liar." In this story, the intimation that our knowledge about hydrophobia has reached the "dried-and-stuffed" stage goes well with the other intimation, that the skeptics in regard to it are in the state of ignorance comparable to that of the king of Siam.

Later than Dr. Parry, but still in this century, Dr. Copland set the stamp of his learning on the doubters thus: "The supposition lately published that there is no such specific disease as rabies, and that it is merely the result of mental anxiety, etc., is only one of the absurdities thrown up on the surface of medical doctrine, and hardly deserves mention, and much less, serious refutation."

But scientific questions are not settled in this summary way, nor has the fear of being thought singular ever long deterred men from asserting what they had come to hold as convictions. That which has been branded as an absurdity has, over and over again in the history of the world, come to be established as a fact; and the same may yet be accomplished for the opinion of those who deny the specific nature of rabies or hydrophobia. One thing is sure, viz., that the attitude of severe criticism seems to offer the only hope for the solution of the riddle of hydrophobia; since, in more than two thousand years, the acceptation and repetition of authoritative opinions has failed to furnish a theory which does not fly in the face of all analogy, or a practice which holds out a reasonable hope of saving a single life. Such is the real state of knowledge in regard to hydrophobia. The theories as to its nature are contradictory and illogical, the teachings as to its treatment are without the slightest hope of success. In regard to both, the ablest men who have discussed it occasionally or systematically are in irreconcilable opposition. While some hold to certain modes of communication, others strenuously deny them. While some admit its spontaneous origin, others will not admit it for a moment. While some think the virus is to be found in the saliva, the blood, the bronchial mucus, the milk, the flesh of rabid animals, others limit it to the first of these alone. In regard to the period of incubation, the widest divergence of opinion exists. The range is from one day to forty years, and no one seems to have been able to fix a limit to either its shortness or its length. Equal contradiction meets the gaze when one turns to the matter of treatment. From the throwing into a fish-pond, as practiced by Celsus, to the inhalation of oxygen, as recently practiced by Drs. Schmidt and Zebeden, there is a variety of methods which demonstrates how utterly every attempt to find a specific has lacked the guidance of any accurate idea as to the nature of the disorder. To almost any statement of men whose names are highly respected in medicine, may be opposed the most positive and contradictory statements of others equally respected. Virchow admits (*Handb. d. Spec. Path. und Therap. "Wuthkrankheiten und Wasserscheu"*) that hydrophobia may be communicated by means of weapons used to kill mad dogs with, and by blood-letting and scarifying instruments—a belief which, but for Virchow's adherence to it, would be correctly designated as obsolete, and which is entirely unworthy of acceptation. Bollinger, a distinguished veterinarian, admits (Ziemssen's *Cyclop.*, art. "Hydrophobia,") the possibility of infection by the migrations of animal parasites, such as fleas and lice.*

The late Dr. Geo. B. Wood admitted the possibility of hydrophobia being caused by the bite of birds, and explains why this does not often occur, as owing to the fact that these animals, like horses, asses, and oxen, do not usually bite (*Practice of Medicine*, vol. i., art. "Hydrophobia"). In view of these facts, it will not seem so remarkable that Sauvages believed the eyes of hydrophobic patients to shine at night like those of cats, or that he should explain this on "meaque de hydrophobia theoria, quæ admittit in hoc morbo fluidum illud in phosphoricam activitatem exaltatum." (*Nosologia Methodica: Vesaniæ*, vol. i., p. 232.) Nor can one wonder that Mead, about

*This curious idea is founded upon a reference, which, when I hunted it up, I found to be a pure assumption of Dr. M'Crae (*Lancet*, March 23, 1872, p. 420) that the occurrence of smallpox thirteen miles northeast from Melbourne, where it was also present, was to be accounted for only on the supposition that it was conveyed by flies. It has been interesting to observe, in my own investigations, how this supposition of Dr. M'Crae has grown to a statement of an established fact, as it has been quoted by foreign writers.

a hundred years ago, should have said, "The influence of the moon in these cases, I am convinced, is of some weight." (*Medical Works*, art. "Hydrophobia," p. 62.)

But, to return to modern times, what shall one think of the attempt of Doléris, the author of the, in many respects, admirable article on this subject in the *Nouveau Dictionnaire de Médecine et de Chirurgie* (1881), to explain the assertion of the occurrence of spontaneous cases by saying that the disorder may be acquired from germs distributed in the air and earth, like "charbon?" Or, how shall we consider the willingness of Sir Thomas Watson (*Nineteenth Century Review*, December, 1877), to accept the occurrence of hydrophobia by the infection of sucklings through the medium of mother's milk, or his statement that the disorder does not occur in Constantinople or Africa?—in both which places it does occur.

But I do not wish to make too much of this aspect of the literature of hydrophobia. I wish to call your attention to the cause of the uncertainties which prevail in regard to it. This is, in my opinion, easy to point out. It is the too great readiness to accept any sort of testimony which may be offered as bearing upon the subject. This fault is to be found in almost all the works treating of hydrophobia, from the earliest ages to the present time. This led Pliny to father such absurdities as the following: "There is a small worm in a dog's tongue, known as 'lytta' to the Greeks; if this is removed from the animal while a pup, it will never become mad or lose its appetite. This worm, after being carried thrice round a fire, is given to persons who have been bitten by a mad dog to prevent them from becoming mad. This madness, too, is prevented by eating a cock's brains; but the virtue of these brains lasts for one year only, and no more." And, again, "So virulent is the poison of the mad dog, that its very urine, even if trod upon, is injurious, more particularly if the person has any ulcerous sores about him. The proper remedy in such a case is to apply horse-dung, sprinkled with vinegar, and warmed in a fig." (Pliny, *Natural History*, book xxix., chap. 32. Trans. by Bostock and Riley.) This same too easy acceptance of testimony led such a writer as Dr. Samuel Bardsley, in 1807, to accept the statement that hydrophobia could be communicated by the mere application of the saliva to the unbroken skin, and to cite with apparent approval a story of a man who had hydrophobia from kissing a mad dog previous to its being hanged. (Samuel Argent Bardsley, *Med. Reports*, London, 1807.) And, most recently, it has led Bollinger, already referred to, to attribute the disorder to drinking the milk of an affected animal, and to the act of coitus. (*Ziemssen's Cyclopædia*, 1875.) While Mr. Williams, in his valuable work on *Veterinary Medicine*, 3d ed., 1882, says that rabies can be communicated through a "thin epidermis without wound or abrasion."

These citations illustrate the most remarkable feature of the literature of hydrophobia. It would seem as if when once the mind has accepted a theory which contradicts all experience in other and fairly well-understood diseases, it loses the ability to distinguish good evidence from bad. A striking illustration of this is furnished by Dr. Dolan, in his otherwise capital book on *Hydrophobia or Rabies*. In his second chapter this writer calls attention in detail to the rules laid down by Dr. Abercrombie, in his *Inquiries concerning the Intellectual Powers and the Investigations of Truth*. These warn against the following fallacies: 1. Receiving as facts statements which are not facts, but opinions. 2. Receiving as facts statements which only assume the relation of facts. 3. Receiving as facts general statements, or the generalization of facts. Dr. Dolan then says: "Some writers, for instance, have maintained with much confidence that a particular state of rigidity of some of the limbs is distinctly characteristic of *ramollissement* of the brain. But further observation has shown that the disease may exist without this symptom, and that this condition of the limbs may appear in connection with other diseases. This observation of facts was in so far correct that this state of limbs does very often accompany *ramollissement* of the brain: the error consisted in giving it as a general fact, or a fact applicable to all cases of *ramollissement*, which is without foundation. Yet such statements, when brought forward with confidence, are often received as facts and rested upon as established principles; and then the facts by which their fallacy might be detected are apt to be overlooked or forgotten." To this reference to the commonest sources of fallacy Dr. Dolan adds: "We are arming our readers against ourselves." And yet he goes on, apparently with his eyes wide open, to reproduce the fault he has just pointed out in speaking of *ramollissement*, accepting statements which ought not to be entertained for a moment in the discussion of so grave and delicate a subject, and admitting as genuine cases which are transparently spurious. I will give an example of this latter mistake, which illustrates several points at once. Dr. Dolan gives in his collection of cases, and, after sifting his material, stamps as nine the following from Romberg's *Diseases of the Nervous System:*

"Case 74. Frederick L., male, æt. 6, bitten on the second finger of the left hand by a dog which had already bitten several other children. Result and time of attack, three months; fatal third day.

"*Treatment.*—A few of the dog's hairs had been cut off to place upon the wound, which in eight days was completely healed. The treatment consisted in taking twelve ounces of blood from the arm, scarifying and applying cantharides ointment to the cicatrix, rubbing in a scruple of mercurial ointment into the inner surface of the left arm. Dr. Horn also visited the boy, and described his features as expressive of extreme anxiety, while his eyes told a tale of immeasurable misery. He implored that he might not be touched or bled again, as he desired nothing more than to be allowed perfect rest."

The post-mortem was made on the 4th of September, 1820, twenty-five hours after death. The smell of putrefaction was already developed. The muscles were dark red. The lungs were charged with blood. The larynx, the trachea and œsophagus were not abnormal in appearance. But, the record says, "the redness of the heart was remarkable, the arteries and veins on its surface looking as if they had been injected. The mitral and aortic valves presented a scarlet hue, the trabeculæ carneæ were darker than usual, the in-

ternal surface of the aorta was of a bright red hue as far as the arch; the blood contained in the vessels was dark and fluid; the inner surface of the stomach was as pale as that of the œsophagus. No morbid change was found in any other abdominal organ. At the urgent request of the parents, the head was not examined."

The history of this case as originally described in Romberg's book (*Nervous Diseases*, translation: London, 1853), taken together with the post-mortem appearances, seems to me to show it to have been one of acute endocarditis, probably septicæmic. But no such idea seems to have entered the heads of the physicians who attended it. As a case of hydrophobia, they went most heroically to work to treat it.

Picture to yourselves the scene. Think of that little child, only six years old, tested with the useless and dangerous tests of handwashing, and mirror, and with urine sprinkled on his skin—the former showing nothing, the latter causing a paroxysm. Think of his being bled, the cicatrix being scarified and blistered with cantharides, and mercurial ointment being rubbed into his arm. Then fancy him, when the doctors came at him after an interval, imploring only to be left in peace, whilst they, with grim determination, bled him again, and dosed him with calomel, after which—to quote Romberg literally—"death came to his relief."

In reporting this as a case of hydrophobia, Dr. Dolan has followed the opinion of Romberg, who when he recorded it had *never before seen a case*. But it strikes me as a very piteous illustration of the truth of what White said (*Doubts of Hydrophobia*, London, 1826,) of the course of many cases. He described the usual alarm, the fear of the patient, the suspicion of the doctor, the test with water, the melancholy conviction of doctor and patient, adding: "The patient and himself, therefore, will soon *make out a case*—the one dies, and the other publishes an account of his end." Does it seem unfair to apply such an expression to such a case as has just been cited? On the contrary, does not the history of the case indicate that general eminence in medical science gives no guarantee of infallibility when this vexed subject is approached?

I have selected an illustration of the point I wished to make, which should include two names well known and justly distinguished, because their very excellencies add force to the proof they furnish that the prepossession of a theory which at the outset demands a certain surrender of the judgment, will impair the freedom of the judgment at every subsequent step. Such it seems to me is the condition in which every believer in the specific nature of hydrophobia stands. The assumption of a specific virus which, and which alone, is the originator of the disease in any individual, compels its adherents to bend their judgment to accept the belief that there is a virus which behaves in a way contradictory to that of every other virus about which we have any positive knowledge. As Lorinser has said (*Wien. Med. Wochenschrift*, 1874): "We know very well the appearances produced, for example, by the bite of poisonous serpents, or by the poisoning of wounds with the poison of glanders, anthrax, syphilis, or cadaveric poison. There are, in general, always the manifestations of more or less rapidly developed inflammation, and of further distribution of the poison through the lymphatics, veins and lymphatic glands, which organs then, in like manner, manifest similar inflammatory symptoms. Nothing of the kind do we see in wounds made by the bites of mad dogs," etc. And, again: "We know, in all pathology, not a single infective disease, which, in regard to the time and symptoms of development, bears the slightest resemblance to hydrophobia."

One might suppose that such a contradiction would lead observers to be constantly on the look-out to find some other way of explaining the phenomena of hydrophobia, and that everything that was presented as evidence in support of it would be subjected to the most rigid scrutiny. But the literature of the subject shows that the very opposite is the case. The *post hoc propter hoc* argument is the one which rules here. A careful perusal of a large number of recorded cases leaves the impression that they have not been studied with any idea that they might be something else than what they appeared to be. Though it is no secret that the dread of water is a symptom of a great variety of affections, one finds over and over again the ablest men resting a diagnosis on this which is acknowledged by most systematic writers to be the least reliable of its signs. Another thing which struck me in examining the records of cases is the readiness with which reporters, aware of the objection so often raised, of the effect of mental influence, accept the statements of friends or the silence of patients in regard to it as evidence that it does not exist. I will give an example of this. In the *Berliner Klin. Wochenschrift*, September 15, 1879, Dr. Findeisen reports a case of a man who died of hydrophobia, and who is positively stated not to have known that the dog that bit him was mad, or to suspect that he had hydrophobia, or connect his disease with the bite. Yet the record states that, on the second day of his disorder, he cried out that he had been bitten by the "poisonous (*giftiger*) dog," and was not crazy.

(*To be continued.*)

Lying-in Room Hints.

A very good article on this subject by Henry F. Walker is published in the *Med. Record*, February 23, 1884. The points which he wishes to emphasize are:

1. Examine every woman immediately after delivery, and if there is any laceration, even a trifling one, close at once with silk sutures.

2. Examine every woman when she begins to move about, and if there be displacement of any kind, anteversion, retroversion, or prolapsus, introduce a proper pessary, with the hope that its temporary use during the period of involution will establish a cure.

3. Examine at birth every male infant, and if the prepuce be so contracted or adherent that, with probe and pressure, the glans penis cannot be uncovered, operate by splitting the prepuce as far back as the corona with scissors or bistoury; the chosen time for operation, unless urgent symptoms present themselves, being the ninth day.

EDITORIAL DEPARTMENT.

PERISCOPE.

A Case of Actinomycosis.

Dr. W. Knight Treves reports this case in the *Lancet*, January 19, 1884:

P. C., aged 45, was admitted to hospital August 17, 1883, supposed to be suffering from a scrofulous affection of the glands of the neck. He is a muscular man with a good family history. His illness began sixteen months before admission, with inflammation about the neck and angles of the jaw, which however only kept him from work for two or three days. He has lived well, and never had cattle to look after. A lump by the angle of the jaw followed the inflammation, which was incised. Subsequently other swellings formed. Over the angle of the jaw, and in the posterior triangle of the neck were three ulcerated and fungating surfaces, those by the angle of the jaw being about one inch and that in the posterior triangle about two inches in diameter. There

were tumors over the collar bone, the second rib, and the fourth costal cartilage near the sternum, each of which was in a direct line, and had followed in regular order the one described as existing in the posterior triangle. These tumors resemble each other in appearance; they are smooth and evenly formed, and are in shape as nearly as possible a half a sphere; the upper one is two inches in diameter, the lower one an inch, and the middle one intermediate in size; they have an elastic, semi-fluctuating feel; the skin over the upper one is thin, red, and evidently about to give way; the skin of the middle one is also discolored; that of the lowest is normal. To the right and left of these tumors are two nodules about the size of a marble, apparently the same thing in process of formation. The discharge was thin and serous, and contained minute yellowish masses, and disintegrated tissue, and had a peculiarly offensive and sour smell. The patient declined operative interference. He remained in the hospital till December 7, the progress of the case being gradual loss of flesh, formation of lumps on the other side of the neck, and in the axilla. The three tumors described became broken down, and he presented before his discharge the appearance given in the woodcut, which is from a photograph. The appearance of these tumors resembled nothing that I had ever seen before. The case was certainly not scrofulous, nor was it like any new growth with which I was familiar. I arrived at the conclusion that it was an example of the disease known as actinomycosis. This diagnosis was confirmed by the discovery under the microscope of bodies which I believed to resemble the fungus described as peculiar to this disease. So far as I can ascertain, this is the first case of actinomycosis described in this country.

Castration for Uterine Fibroids.

We learn from the *Edinburgh Med. Jour.*, January 1884, that at a meeting of the German Science Association, Wiedow, of Freiburg, opened a discussion on this subject. He suggested that the operation was now thought too little of, because at first it was taken up with too great enthusiasm, and tried in unsuitable cases. He collected 63 reported case, of which 12 had been fatal. In one of Hegar's cases there was a temporary improvement after operation, lasting about six months, followed by increased growth and a return of the hemorrhage. The patient died a few months subsequently, when the tumor was found to be fibro-cystic and to contain purulent serum. In this case, as in a similar one reported by Schrœder, the tumor was enormous (kolossal). For such cases the writer would give an unfavorable prognosis. Hegar had operated 21 times with 3 deaths. Of the 18 non-fatal cases 1 terminated as above, while in 17 the result of operation was very satisfactory. Sooner or later the menopause, with shrinking of the tumor, occurred. The writer then showed drawings of Hegar's cases before and after operation, and submitted 4 of the cases for examination. Freund, of Strassburg, reported 6 cases in which he had operated. All had lived, and in five there had been shrinking of the tumors and cessation of the bleeding. In 1 there had been no improvement. In this case the tumor was "kolossal." Hofmeier, of Berlin, asked what were the indications for castration as opposed to removal of the tumor. Hegar, of Freiburg, said that the size was not the only point that would guide one in answering

this question. As regards the danger of the two operations, he said that on an average that of castration was the lesser, though this was not invariably the case. He always had instruments at hand to remove the tumor if advisable, when he undertook castration for fibroids. If he found a well-developed pedicle, he removed the tumor. He regarded castration as a very efficient operation, and thought it should be recommended before the tumor had acquired great size. Kaltenbach, of Giessen, drew attention to the fact that occasionally the ovaries were situated on the apparent posterior aspect of the tumor, and that thus great difficulty might be occasioned. He reported two successful and satisfactory cases of his own, but drew attention to the fact that removal of the ovaries did not always result in the menopause. Badlehner referred to two cases where decided diminution of the tumors occurred after the natural menopause. Müller, of Berne, had operated in 6 cases, with 1 death and 1 uncompleted operation. In the remaining 4 the result was satisfactory. He regarded castration merely as a resource, and looked on extirpation of the tumor as the ideal operation. Hegar remarked that he had seen fibroids suddenly begin to grow and become cystic after the natural menopause, even in cases where there had occurred some shrinking, just as had been mentioned in the discussion as having followed the anticipated menopause. In all those cases the tumors had been very large, and he would therefore regard the prognosis of castration for very large tumors as doubtful.

Neuralgia of Bone.

In the *London Med. Times*, January 19, 1884, Dr. J. Matthews Duncan says:

When a bone of the pelvis has been injured, the part, sometimes after complete recovery so far as manipulative examination is concerned, retains a morbid sensitiveness or weakness. It is not swollen; but it is liable to ache severely or be painful. Cases of this kind in bones of the limbs I have known to be successfully treated by laying the bone bare by knife, raising the periosteum, and gouging or chiselling off the surface of the affected part. In my cases I have not resorted to this, and I may best and most briefly tell you all I know of the matter by giving a few details of two.

A fine, healthy young woman had a first labor, managed by a skillful accoucheur, natural in all respects, except that delivery was completed by short forceps. At the time of delivery nothing special was noted as to wounding; but the patient felt a deal of pain in the private parts, on the left side, during all her recovery. She got up, however, and was well and strong; but as soon as she began to walk, the pain in the left labium recurred, and was increased in severity as she increased the use of her legs. The pain was now ascribed to weakness, now to falling of the womb, now to ulceration, and was treated accordingly, but with no good effect. Careful local investigation discovered the labium to be internally cleft, and the deepest part of the cleft quite healed, healthy looking, but adhering to the descending ramus of the pubes. The bone was scarcely tender, but whenever it was touched, the patient at once, and again in subsequent examinations, declared that that, and that alone, was the seat of pain. The bone was occasionally tender after great exertion, as in dancing: it was always and exclusively the seat of the aching pain. The labium had been cut by the anterior margin of the left blade of the forceps, and healing had taken place with adhesion of the cervix to the adjacent bone. Complete satisfaction as to the seat and nature of the disease was half the cure. Avoidance of long walks and of much dancing, hot bathing at bedtime, tonics, iodide of potassium, were all used, and did not bring quick relief. It was not till these cures had been continued more than a year that the whole matter was forgotten. Now she never feels it.

A middle-aged woman, a clergyman's wife, was thrown out of a little pony phæton, and fell on her sacrum. After the accident she had continued pain in it for a long time; and the pain recurred after intervals of health varying in length. When it came, she felt the part to be a little tender, but not swollen. Latterly, after some years, she was led to believe that now her suffering was not from the injury, but from disease of the womb. Then she consulted me, and it was very easy to make out that the pain was in the bone, exactly where the injury had been inflicted. There was no uterine disease, and the conclusion was inevitable that the case was one of neuralgia consequent on mechanical injury. With assurance on this point she was quite satisfied, and went away with some directions as to treatmeent when the aching came on.

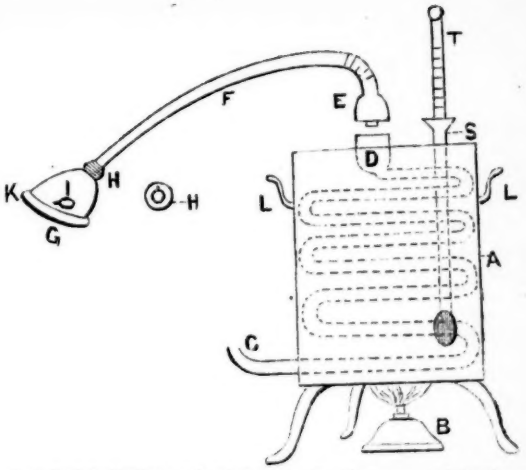
Perhaps this disease should be called chronic ostitis, not neuralgia: I do not here attempt to decide.

Antiseptic Inhalation.

Dr. L. E. K. Shuttleworth writes to the *Lancet*, January 5, 1884, from San Remo, Italy, as follows: In the present state of our knowledge of the bacilli of tubercle and of the action or inaction of antiseptic inhalations, I believe all observations are of value to the profession. I therefore venture to send you a few lines, recording my experience of the action of antiseptic inhalations as ordinarily used, from observations taken, thanks to the kindness of my colleagues here, Dr. Daubeny and Dr. Freeman, in typical cases under their care, as well as under my own care, and also a few lines descriptive of the results of experiments I have made on the vaporization of carbolic acid and a description and drawing of an apparatus I have had constructed, by means of which I believe carbolic acid and other disinfectants may be much more thoroughly vaporized and inhaled than by any ordinary method.

During last winter I examined constantly the sputa of patients under the care of Drs. Daubeny, Freeman, and myself, in which the bacilli had been demonstrated, and I was much struck with the fact that in the great majority of cases where carbolic inhalations were used with an oro-nasal inhaler in sufficient quantity, a great diminution in the number of bacilli took place; and that, though from time to time fresh crops appeared, these, when the inhalations were continued, regularly but gradually diminished both in frequency

of occurrence and in the relative number of bacilli. But I was also struck with the difficulty in persuading patients to inhale efficiently—i. e., to apply the inhaler so as to exclude all uncarbolized air, and in many cases also they did not at first inhale freely, and the carbolic acid, being not very readily vaporized, is not taken up from an ordinary inhaler unless the respirations are fairly deep and strong. I therefore considered, How can carbolic acid be effectually vaporized? And during the summer months made the following experiments, with the kind assistance of Mr. Gurnell, the well-known chemist at Ryde. I exposed fifteen minims of carbolic acid to the air of an ordinary room in a watch glass; at the end of twenty-four hours the weight was not perceptibly altered. Next I exposed fifteen minims in a watch glass to a heat kept as nearly as possible to 170° F., in a water oven; the result being that at the expiration of five hours, during which the temperature had never exceeded 170°, or been below 150°, no trace of carbolic acid could be found in the watch glass. Next I tried with a temperature ranging from 200° to 212° F., and found my carbolic acid had entirely disappeared in two hours. My next idea was to pass all the air inspired (1) through eight or nine feet of metal tubing heated to any temperature required; (2) through the carbolic acid also heated, and (3) through a proper oro-nasal mouthpiece. For this purpose I had an instrument constructed consisting of nine feet of metal tubing coiled inside a tin boiler, the afferent end being open to the air, and the efferent expanded into a small chamber, closed by a hollow plug of metal, in the interior of which tow could be placed to receive the carbolic or other disinfectant, and which was connected with an ordinary oro-nasal mouthpiece properly padded by a large india rubber tube. I then placed 13 grains of carbolic acid on 8 grains of dry tow, making a total weight of 21 grains, and placed this in the hollow plug. After ten minutes' inhalation the total weight was reduced to 13 grains; after twenty minutes, including the time occupied with the first weighing, to 8 grains +, after thirty minutes to 8 grains —, showing, as I believe, that the total amount of carbolic acid was completely vaporized in about twenty minutes, and from my sensations of tingling lips, sore nose and throat, pain in the chest, and slight vertigo, with exhilaration of spirits, I believe faster than desirable for ordinary inhalation. The temperature of the water in the boiler ranges from 170° at the commencement to 198° F. at the termination; a slightly lower temperature causes the vaporization of the carbolic to be more gradual, and I venture to claim for this system that by it carbolic acid and many other antiseptics can be perfectly vaporized in hot dry air, the heat and dryness being of themselves beneficial, and that the apparatus can be used at the patient's own home, and is not expensive. Mine, made by a working tinsmith, cost less than five dollars.



A, Cylindrical boiler, made of tin, 8 in. by 6 in., supported by three legs, closed except at S, over a spirit-lamp (B). C, The afferent end of the air tube, which enters the boiler at the side and is coiled round within it, 90 in. of metal tubing having an internal diameter of ½ in., being disposed in the cylinder. D, The efferent extremity of the tube, ending in a small cylindrical expansion, which receives the hollow plug (E), having an internal diameter of 1½ in., and a depth of 1 in., in which the dry tow to receive the antiseptic substance is placed, and which is connected with the mouthpiece (G) by an India rubber tube (F), having an internal diameter of ¾ in. and a length of 18 in. G, The mouthpiece, with three valves. I, A small one on each side to give exit to the expired air. H, A larger one to admit the heated antiseptic air and prevent the return of expired air. K, An India rubber air-pad round the mouthpiece, which covers both nose and mouth. L L, Handles for lifting the cylinder. S, A small funnel, through which the boiler (A) is filled, and the thermometer (T) introduced. (The drawing is one-tenth the actual size of the apparatus.)

Electrolysis in the Treatment of Dracunculus.

Dr. Alexander S. Faulkner thus writes in the *Brit. Med. Jour.*, December 29, 1883:

O. L., a Hindu goldsmith from Kattyawar, aged 28, was admitted into the Civil Hospital, Aden, on July 25th last, suffering from the effects of the presence of four Guinea-worms in different parts of his body.

The patient, though a slight man, was fairly nourished, and his general constitution and functions did not seem much impaired. The different positions of the several worms were as follows; About the upper third of the outer aspect of the right leg, a worm had protruded about three inches; on the lower third of the outer side of the left thigh, another had also protruded to the extent of about two inches; on the dorsum of the left foot, he had a fistulous opening, indicating the site where a worm appeared, but was broken off in the patient's endeavors to extract it, but the remaining portion of the worm could be distinctly felt in the surrounding subcutaneous tissues; and on the back of the left hand, especially between the little and ring fingers, another worm could not only be felt, but its tortuous course was distinctly visible, but, so far, its presence caused no inflammation, and, consequently, there was no apparent indication of the site of its intended exit.

The patient had only been in Aden for three months, having previously resided at Kattyawar, in India (a district where this disease is of very

common occurrence). The first indication he noticed of his present condition was a "swelling" on the outer aspect of the left thigh, which resulted in an abscess, and subsequently burst, discharging a good deal of pus, and the head of a Guinea-worm. In trying, by forcible traction, to extract the latter, the worm naturally broke, its greater portion remaining within. Subsequently, other abscesses formed, in like manner, in different parts of his body, caused in each case by the presence of a Guinea-worm, all of which were treated by the patient by extracting only portions of a worm at a time. In this way, he stated, he had been suffering for the last five years.

On presenting himself for treatment at the Civil Hospital, I determined to try the experiment of applying galvanism to the protruded worms, an idea I have for some time wished to test practically. The result in this case was most encouraging and satisfactory. The patient held one pole of the battery in one of his hands, and the other I applied to the head of the worm which protruded from the patient's right leg; he at once distinctly felt the sensation of the worm "wriggling" within, which caused him slight pain. I left him for about an hour with my hospital assistant, with instructions that slight and gradual traction should be applied on the worm, and by these means, and in this short space of time, the whole worm was extracted entire. Afterwards, I applied the battery, as before, to the worm protruding from the patient's thigh; and, although the effects on this worm were not quite so satisfactory, still the result was very encouraging, as the entire worm was successfully extracted next day. Poultices were applied over the fistulous opening on the foot and the patient's left hand—the situations of the two other worms. On July 30th four inches of a worm were extracted from the foot after the battery, and subsequently a poultice, had been applied. No other worm reappeared here, and the inflammation soon subsided. I therefore concluded that the whole of the remaining portion of the worm, which the patient had previously broken, had now come away.

On August 3d, about two inches of the worm on the patient's left hand appeared after the bursting of a small abscess. Galvanism was applied to this worm as in the former instances, and a poultice ordered. Galvanism was again applied on August 5th. The worm had protruded four inches, and was now six inches long. On August 6th the protruded portion of the worm was about twelve inches in length. The battery and poultice were applied, and in the evening the entire worm was extracted whole. There being now no signs of the presence of any other worms, the patient was discharged from the hospital.

Remarks.—The usual routine method of treatment in these cases is the application of poultices over any inflammation caused by the presence of a Guinea-worm, and, when once the worm has appeared, means to prevent its re-entry into the body are resorted to, such as twisting the protruded worm round a small quill or other convenient substance, and gradually twisting the worm more and more each day till the whole is extracted, a decidedly lengthened and tedious procedure in most cases, and usually unsatisfactory in its results, as the worm is very apt to be broken, and, if so, the general constitution of the patient suffers. The idea of applying counter-irritation to the worm itself to expedite its safe extraction in these cases, first struck me when perusing some notes (*Annual Medical Reports of the British Army*) by Surgeon Stewart, Bombay Medical Department, in which he stated he had tried the experiment of applying the sting of a scorpion to protruded worms; and my object in recording the above brief notes of my case is to bring to notice the very satisfactory results I obtained by far simpler and more convenient means of counter-irritation, viz., the application of galvanism to the worm. This, no doubt, has the effect of paralyzing the worm to such an extent that practically there is no resistance to its extraction so far as the worm itself is concerned, and its rapid and entire extraction is consequently made easy if only ordinary care be taken in handling the worm.

Although this mode of treatment is a novel one (so far as I am personally aware), still I feel that the successful result of the above case, obtained by its means, is sufficient in itself to warrant the hope that others more favorably situated than myself for meeting this disease will give it a fair trial, and record their results.

Protean Skin Affections in Children.

Before a recent meeting of the Academy of Medicine in Ireland, Dr. C. F. Moore read a paper detailing a protean skin affection. He stated that children were not unfrequently attacked with a complication, assuming a resemblance to pruritus cutaneus of Hebra, prurigo, pemphigus, and, in some severe cases, pemphigus gangrænosus, or burnt holes of older authors. The diseases which in Dublin had been complicated with the foregoing in varying degrees of severity, were varicella, scabies, insects, dentition, certain forms of rash, induced by inunction of irritating medicinal or domestic remedies, and, rarely, vaccination. The cases which had lately come under his notice were those of children whose ages varied from a few weeks to eight years. He did not think he had seen in this country a case of the disorder specially named prurigo by Hebra. Bad or unsuitable food tended strongly to the production of the disorder. The irritation caused by pediculi and other insects, and by clothing in a damp or uncleanly state, not uncommonly produced pruritus. Unhealthy surroundings, and a low condition of the child, or of its nurse, tended greatly to the production of the ailment which he wished to bring under notice. The treatment of these cases resolved itself into general and local—better sanitary condition, better food for the child, removal as far as possible of the cause of the irritation, thorough cleanliness, and, generally speaking, soothing applications; baths, with bran, or tar, or liquor carbonis detergens, etc.; mild alteratives, with suitable tonics; cod liver oil, or preparations of iron. In all cases inquiry should be made for the presence of intestinal worms, and the treatment suitable pursued. The affection, which seemed allied to prurigo, pruritus, and pemphigus, occurred in eight cases that were originated apparently by varicella; in four cases where scabies existed previously; in one case in which tallow had been used as a domestic remedy

by inunction; and another in which a very slight appearance of prurigo natis existed. The latter ailment was apparently increased after vaccination. The cases that had come under his notice had occurred almost invariably either in the cold spring or early winter. He did not refer to the many cases of pruritus and prurigo that he had seen in the adult and in youth. The affection noticed by Mr. Hutchinson, of London, as varicella prurigo, and regarded by Mr. Balmanno Squire rather as ecthyma or lichen urticatus, seemed to resemble cases which he had seen in Dublin, but which were of a very protean character, and did not generally assume the serious forms described by Mr. Hutchinson, or by Professor Hebra in describing the life-long character of the prurigo met with at Vienna.

Dr. H. C. Tweedy described the case of a boy aged sixteen, who had come under his observation, presenting the features of true prurigo, which he had had since childhood, and which resisted all treatment.

Dr. Duffey said Dr. Moore had described several skin affections, but had not specified the particular one which he considered now prevalent. It was a common thing to find eczema on the soles of the feet and the palms of the hands in infants.

Dr. Fitzpatrick did not believe that pure vaccine matter would produce skin disease in a healthy child.

Dr. Moore, in replying, was glad to find that Dr. Fitzpatrick's experience confirmed his own opinion that vaccination in itself was not a cause of skin disease.

Reviews and Book Notices.

Notes on Current Medical Literature.

——The "Fifth biennial Report of the State Board of Health of Maryland" forms a volume of 275 pages, with a great deal of good and original matter in it. The report of the Secretary, Dr. C. W. Chanceller, surveys the whole field of action of the Board, and is full of suggestion. A number of valuable papers were read before the convention on subjects relating to public health, and are printed with the report. The volume can be had of the Secretary, Baltimore, Md.

——The "Thirtieth Report on the Births, Marriages, and Deaths in the State of Rhode Island" (for 1882) is a portly pamphlet of 178 pages, bristling with statistics, and presenting the vital records of the State with every desirable fullness and with most satisfactory clearness. It is a model volume of its kind. Those wishing it may address Chas. H. Fisher, M. D., State Registrar of Vital Statistics, and Secretary of the State Board of Health, 17 College street, Providence, R. I.

——A "Tribute to J. Marion Sims, M. D.," by Dr. W. O. Baldwin, Montgomery, Ala., is a composition full of appreciative views of the great gynæcologist's career.

——A striking paper was read by Dr. E. P. Howland, of Washington, D. C., before the American Association for the advancement of science, at Minneapolis, August 20, 1883. Its subject was "The Application of Nitrous Oxide and Air, or Nitrous Oxide and Oxygen, Under Pressure, to Produce Anæsthesia in Persons for Dental and Surgical Operations." He begins by saying: "From my own experiments and the practical operations made in Paris, I believe that the administration of nitrous oxide and air or nitrous oxide and oxygen, in condensed air chambers, will yet supersede the use of ether and chloroform in prolonged dental and surgical operations, as nitrous oxide has already superseded them in ordinary dental operations." The reasons he gives seem to us very conclusive.

——The fourth annual report of the Newark (N. J.) Eye and Ear Infirmary, indicates that it has grown to a position of great usefulness in that community.

——The Annual Announcement of the Cooper Medical College, San Francisco, shows that institution to be in a flourishing condition.

——*Godey's Lady Book* for March is a number upon which it would be hard to make any unfavorable comment. For some time past we have been watching with interest and pleasure the liberal policy which has been pursued by the present proprietors of this progressive magazine, and, from the evidence before us, we are now prepared to say that the editors of *Godey's* are bent upon placing the future record of the magazine on a higher plane than it has ever stood before.

——*Lippincott's Magazine* for March opens with an article on "The Berlin of To-Day," by Anna Maynard Butler, sketching the chief features, external and social, of the German capital, with illustrations, including a portrait of the Emperor and views of the old castle and Bismarck's palace. Quite a number of other excellent articles are included.

——The Tenth Annual Report of the Cincinnati Sanitarium has an excellent introduction from the pen of the Superintendent, Dr. Orpheus Everts. Among other matters, he says of venesection:

"Fifty years since, blood-letting was the first remedy suggested and employed by the medical profession in the treatment of nearly every form of disease. Not one physician of a thousand now bleeds a patient under any circumstance. The more intelligent and thoughtful, however, begin

to recognize the fact that the profession has been carried to an unprofitable extreme by the force of fashion in this matter. The lancet will be used again, not as a fashion, but as a matter of judgment, based upon knowledge."

——In a reprint before us, Drs. C. A. Oliver and C. H. Burnett, of this city, give the details of a rare and interesting case of recurrent dropsy of the left middle ear, complicated, after eight years' duration, by an acute attack of monocular optic neuritis (choked-disk) on the same side, followed by general tabetic symptoms; with remarks.

BOOK NOTICES.

A Manual of Obstetrics. By A. F. A. King, M. D. Second edition. Philadelphia: H. C. Lea's Son & Co. Small 8vo., pp. 338.

A condensed and yet not superficial presentation of the art of midwifery is satisfactorily accomplished by Dr. King in this little volume. He has not confined himself to what a student needs for his examination, and has omitted the discussions of debated points which take up so much space in the larger treatises. In the present edition he has increased the size of the book somewhat, and has carefully revised all the text. A sufficient number of illustrations are inserted to explain positions and instruments.

Female Hygiene and Female Diseases. By J. K. Shirk, M. D. 8vo. cloth, pp. 102. Lancaster Publishing Company, Lancaster, Pa.

It is a debated question how much information ought to be given to the public about diseases of females. We are and always have been in favor of teaching them freely, provided it is done in the proper spirit and manner. We can say of this little work that it fully meets these requirements. It is alike free from superficiality and sensationalism, and one should have no hesitation in recommending it to any woman who desired to acquaint herself with the hygiene of her sexual life. The author is a respected regular physician, and his volume is meritorious.

Legal Medicine. By Charles M. Tidy. Vol. iii. New York, Wm. Wood & Co.

This volume, one of Wood's Library of Standard Medical Authors, contains the portions on sexual crimes, asphyxia and suffocation. It is a very carefully studied treatise, though written from the English point of view, and not so useful to the American reader as one based on the practice of our own courts. The collation of cases is large, and they are presented in a thoroughly systematic manner.

The Medical Directory of Philadelphia for 1884. Edited by Samuel B. Hoppin, M. D., Philadelphia: P. Blakiston, Son & Co., 1884. 1 vol., 8vo. Price, $1.50.

This convenient little volume contains a list of the Hospitals, Homes, Asylums, and Dispensaries of Philadelphia, druggists, physicians, medical societies, public boards, colleges, and the laws relating to practice. It will be found very convenient for reference, and as far as we have examined it, is quite accurate.

A System of Oral Surgery. Being a Treatise on the diseases and surgery of the mouth, jaws, face, teeth, and associate parts. By James E. Garretson, M. D. Illustrated with steel plates and numerous wood-cuts. Fourth edition, thoroughly revised, with important additions. 8vo. extra cloth, $8.00. J. B. Lippincott & Co.

The treatise of Dr. Garretson has been markedly successful in the field which it occupies. Not only has it been found a standard work of reference for the surgeon and practitioner, but as a text-book for students it has been adopted by dental colleges throughout our country as the most approved system of oral surgery to be found. It is indeed remarkably complete, and one has but to turn over its leaves, or look through its index, to appreciate how exhaustively all the topics relating to this specialty have been treated.

If the investigation is pursued further, and an individual chapter is selected for perusal—as, for instance, the comprehensive one on "Associative Lesions of First Dentition"—the reader will find an excellent monograph, carefully condensed to the limits of a chapter, and expressed in language of admirable clearness.

Or again, take the last chapter, that on "Diagnosis," and we are presented with a most masterly exposition of this intricate subject, in which our judgment hesitates which to praise highest, the fullness of scientific knowledge, or the select phraseology in which it is set forth.

With regard to the present edition, it has been enlarged by several new chapters; much of the text has been rewritten and rearranged, and seventy-five new cuts have been added. The wide experience of the author in the field of his selection appears on every page.

The manufacture of the book is of the best character. In the somewhat over a thousand pages of text, there are more than six hundred cuts, and a number of steel engravings. While many of them are from other works, there are quite a number which are new.

We may say that this volume fills the demand for a book on this specialty, and while by revision and improvement it is maintained at its present excellence, there will not be room for another.

THE
Medical and Surgical Reporter,
A WEEKLY JOURNAL,
ISSUED EVERY SATURDAY.

D. G. BRINTON, M. D.,
JOSEPH F. EDWARDS, M. D., } EDITORS.

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THE DISCOVERY OF UREA IN THE SALIVA OF PATIENTS SUFFERING FROM MORBUS BRIGHTII.

That there are many varieties of morbus Brightii is a well-established fact, and that some varieties later will be proven to form a disease by themselves can scarcely be doubted. It is also well known that some forms of Bright's disease never evince symptoms of uræmia, that the patients suffering from one of these die of other complications, while there are again varieties of diffused kidney disease, in which the patient invariably succumbs to uræmia. The facts last mentioned have already found one explanation. In those forms of the malady where large serous effusions are a common occurrence, these watery accumulations have been found to contain great quantities of urea; the serous cavities are, therefore, in these cases *quasi* reservoirs for the surplus of urea, and the blood is kept comparatively free of this obnoxious and dangerous substance, while in those cases where dropsies and œdemas are rather rare, this great product of waste is bound to accumulate in the blood, if the latter has no other outlet for it. The kidneys are unable to excrete it in sufficient quantities, its excretion by the serous membranes is also at fault; the blood, therefore becomes the reservoir for it, and as a natural consequence we see that whenever the quantity of urea in the blood becomes sufficient to poison the latter, uræmia, *i. e.*, poisoning of the blood by accumulation of urea, takes place.

It was by no means foreign to the subject to suppose that in those cases of diffused kidney disease, where large watery effusions do not rid the blood of the urea, other fluids in the body would contain the urea, and this would be especially the case in that form of morbus Brightii, contracted cirrhotic kidney, in which, as is well known, serous effusions belong to the rare phenomena; yet, some cases, running their slow course for years, reach their fatal termination without almost the least œdema having made its appearance, while the sudden development of uræmia is as frequent as the fact that death usually assumes the latter form.

Dr. R. Fleischer has recently made this subject a special study. He supposed the saliva to contain urea in the cases which we last mentioned, and his laborious researches (published in the *Med. Chir. Rundschau* for 1883) proved that such does really happen. He discovered urea in all those cases where a cirrhotic kidney formed the malady, and in all others where uræmia appeared later or caused the death, even if at the time no symptom of uræmia occurred. His discovery, while it may lead to other interesting investigations, has probably also a diagnostic value. It is known that occasionally we meet with cases of contracted kidney, where for certain periods neither œdema or dropsy, nor albumen or tube-casts, are present, where the history alone, or the condition of the heart, the deterioration of the blood, or the examination of the retina, can instruct us regarding the nature of the case.

For this reason we will translate for the benefit of our readers the method employed by Fleischer.

To gain for the original experiments a larger quantity of saliva, one-third of a grain of pilocarpine was injected subcutaneously into the individual to be experimented upon. Thus larger quantities of saliva were procured than it had formerly been possible to obtain. For the first investigations he had 300 grammes (about 2½ ounces) at his disposal; later, 800 grammes; then 2 litres; and finally 4 litres. The buccal cavity first was thoroughly cleaned, then the saliva immediately after its secernation combined with absolute alcohol, precipitated, then filtered, the filtered part evaporated, the residue treated with absolute alcohol, and after evaporation dissolved in amyl alcohol. By this method even very minute quantities of urea could be discovered. If the amyl alcohol is permitted to evaporate in a hot porcelain dish, any urea dissolved in it will separate itself in the shape of the finest needle-crystals, which before and after their change into nitrate of urea, may be identified either microscopically or by their chemical reactions. In healthy individuals (those first experimented upon) up to two litres no urea was discovered; in 3 litres (about 3 pints) such minimal quantities were detected as to be unweighable. Such minimal quantities must be considered as irrelevant. But as this method permits the detection of 1½ milligramme in 250 cbctm. saliva, it is more than sufficiently accurate.

In conclusion, we will add that Fleischer succeeded in every one of the cases mentioned above (cirrhotic kidney, and other forms of Bright's disease, where uræmia threatened), to demonstrate a weighable quantity of crystallized urea in 250 cbctm. saliva, and that the largest quantity he detected was 0.3 to 0.4 (about $\frac{5}{8}$ gramme) of urea per day.

THE PROPER METHOD OF MEDICAL LEGISLATION.

We often hear complaints by physicians that legislatures are so supine about passing laws regulating sanitary measures, creating health boards, against quackery, and the like. The fact is so: but what is the reason of it?

That it is solely to be charged to the general ignorance and neglect of public health in the minds of legislators, we do not believe. We should rather be inclined to put, if not the ignorance, at any rate the neglect, at the doors of medical men themselves.

They make no combined general effort to carry through a well-digested plan about which the large majority are in unison. If they did, there is little doubt they could carry any measure which they would thus unite upon. We have on various occasions put this prominently forward as the real cause of the failure to create a Board of Health for this State, and other similar legislation in any State; and we are reminded of it by a passage in an address on medical legislation by Dr. H. Hakes, of Wilkesbarre, Pa. His words present the subject so well that we extract them:

Preliminary to asking or recommending medical legislation, there ought to be something like unanimity and general agreement among the members of the profession as to the statute proposed to be enacted. As in any other matters of legislation, to be efficient the proposition requires united or concerted action and active work—in not exactly parliamentary, but common parlance, the legislature must be bored. We will do well

to simulate the methods of corporations, monopolies, temperance advocates, the liquor dealers, etc. As there will probably be no further meeting of the General Assembly within a year, let us improve the time, and through individual and societies' effort, inquire of each candidate for legislative honors how he will feel disposed toward those legislative measures which the profession are already agreed upon, and which are of urgent, immediate, and vital importance to the people of the State. An ordinary legislator is not such an awe-inspiring individual that we are to suppose he knows everything. Who among our number has spoken to our Representative in Congress about a more liberal appropriation for the National Board of Health? Probably not one; and yet if addressed by the two medical societies over which his constituency extends, I doubt not you would in due time hear a good report of him. And the same might be said of all the other members.

This, as the Romans used to say, touches the matter with the point of a needle—*rem acu tetigit*. It shows just where the trouble lies. The profession has not yet learned—though the lesson is not a modern one— that Wisdom may cry in the streets till she is hoarse and no man will regard her. She must do more than cry and preach. She must personally button-hole her hearer, and insist that he, individually, do what is required, until, at last, even if he be like the unjust judge, and respects neither God nor man, he will do it that she may cease troubling him.

Less metaphorically speaking, we must use our personal acquaintance with our legislators while at their own homes, to make them understand what we want, and impress it so often and so thoroughly on their minds that they will vote in favor of public health projects when they are brought up.

THE ECONOMICS OF DISEASE.

There is one side of preventive medicine that may be urged upon the public with a strong chance of securing their attention, and that is the expensiveness of disease. In their individual cases they appreciate it well enough, and often howl loudly about loss of time and heavy bills at the doctor's and druggist's. But with the narrowness of view and selfishness of interest which generally characterize mankind, it is hard to get them to look at its cost in gross.

This may be estimated in several ways, and includes a number of factors. It has been calculated by statistical hygienists that of the cases of disease now current in civilized communities, about *one-third* could have been prevented by intelligent sanitation, personal or general. In our opinion this estimate is too low, rather than too high: but take it at one-third. Then the actual loss to these patients or their families is represented by one-third the whole amount paid doctors, druggists, nurses, etc., in a community, plus the loss of time, whatever that may be.

But this is only the first item in the bill of charges.

One-third of all the investment locked up in hospitals, dispensaries, asylums, homes, etc., could be placed to profitable and productive use were the laws of health observed.

Much more than this: numerous limited localities, vast tracts of fertile land, now shunned or but partly tilled, because of their ill report on the score of health, would be doubled, quadrupled in selling value and producing power, were they made free from the poisons which infest them. Millions of acres of the finest soil in the United States are lying idle by reason of the paludal poisons which are generated about them. Yet there is strong testimony that systematic action on the large scale can overcome these miasms.

We have spoken only of disease, but we must also take into account the sequelæ of disease in destroying ability to work, and thus casting the heavy expenses of permanent invalidism on the family or the commonwealth, or, by a fatal result, depriving the community of a life which would have possessed a value as capital applied to the production of wealth.

This has been the subject of calculation by political economists in England and Germany, and in both countries they have reached the conclusion that the value of an unskilled laborer, at twenty-five years of age, to his country, is $1200. In other words, this is the average sum which

such a person will contribute during his life to the wealth of the community in which he lives. Now, if we suppose one-third the deaths in a community are preventable, we can readily see how much richer the community would be were it to exercise the necessary prophylaxis.

These are but a few of the practical considerations to which this subject leads, but they will serve as hints how strong a case may be made of this side of sanitation.

PHILADELPHIA SEWAGE.

That our sewage system, scanty and primitive as it is, is fundamentally faulty, the merest sanitary tyro knows full well.

Now that Boston has introduced a new and very good system of drainage, it will be in order for us to follow suit and to endeavor, if possible, to outdo our sister city. Our Public Buildings will, or at least *ought* to be soon finished, and then we presume that our rulers will be casting about them for some new job, and to save them trouble we will suggest one that will place our city, from a sanitary point of view, ahead of the world.

It has been calculated that the money value of the total annual excreta of each individual is two dollars. For our city this makes two million dollars that is annually wasted. This sum would certainly represent a very large interest on the cost that would be incurred in properly sewering our city, and by a pneumatic system removing the waste to a distance and converting it into manure. Financially and hygienically, such a proposition should commend itself to our authorities.

NOTES AND COMMENTS.

Intermittent Fever Among Children.

A very valuable paper was that read before the British Medical Association by Dr. W. R. Thomas (*Brit. Med. Jour.*, January 19, 1884,) entitled "On Intermittent Fever Among Children in Low-lying Districts; Its Frequency and the Importance of Recognizing It, Owing to Its Curability." The symptoms he thus describes:

"The child for a few days appears to be cross and irritable, disinclined for fun or amusement, and seems to be languid and excessively weak; the appetite is poor, and whenever moved the child cries, as if any movement gave rise to pain. After a time the patient seems to be cold; the face looks pale and pinched; the hands are shrunken and pale; the skin generally is dry and rough; the appetite is poor; the respiration is frequent, and the pulse is frequent and small.

"After a time, which is extremely irregular, ranging from half an hour to two or three hours, the skin begins to be hot and dry, the pulse, which before was frequent and small, becomes now full and yet frequent; the respirations become more frequent; there is want of appetite, great thirst, costive bowels, the urine is scanty and high, and occasionally there is slight delirium. This stage continues for from two to six hours.

"Then comes the sweating stage; the whole skin becomes bathed in perspiration, and all the symptoms abate; respiration becomes more natural; the pulse full, and less frequent; the appetite improves; the thirst goes; and a deep sleep comes on, from which the patient awakens apparently refreshed, but very languid.

"Such is a description of these cases when seen by the medical man daily; but generally speaking, in the out-patients' department in hospital practice, it is difficult or impossible to obtain a concise account of the case from the parent. This is the sort of a case we are apt to see. A patient, aged eighteen months, is said by the parent to have been becoming weaker day by day for the last two months. The lips and face are pale; the pulse frequent and weak; the appetite is poor; thirst is great; bowels costive; urine high; there is no lung or heart mischief; no abdominal signs of importance.

"In such a case it is often difficult to make a proper diagnosis; and when we see a patient daily becoming weaker, and more especially if we get a history of the heats and sweats, we are apt to look out for tuberculosis. I have many times been quite at a loss when trying to ascertain the cause. I have looked out for phthisis, pulmonary, or abdominal; and, thinking that the profuse perspirations, in the head and all over, the throwing off of the bed-clothes, the constant crying, as I presumed, from aches and pains, might be symptomatic of rickets, I have looked out for other corroborative symptoms, but have failed to meet with them.

"Whenever I meet with cases presenting such symptoms now, I always make particular inquiries as to where the patient is living, and

almost invariably find that the house is in a low-lying region of the town, that it has been, in fact, exposed to malaria, but not in the concentrated form which produces ague."

In these cases quinine acts like a charm.

Salicylic Acid In Cerebro-Spinal Meningitis.

The great fatality of this disease lends additional value to the article in the *St. Louis Courier of Med.*, February 1884, by Dr. D. C. Ramsey, which he thus concludes:

1. The analogy existing between rheumatism and cerebro-spinal meningitis would suggest and be good reason for the use of similar remedies in both diseases.

2. Salicylic acid being the best remedy, almost a specific in the treatment of acute articular rheumatism, would be a strong indication for its use in cerebro-spinal meningitis.

3. It produces a marked reduction in the temperature; the fever being thus lowered, the tissue-destruction and the onward progress of the inflammation is checked, thereby giving the patient rest.

4. It controls the intensely annoying metastatic pains of head, back, elbow, and knee, giving the patient ease.

5. It exerts a direct influence for good over the inflammation itself, and can be taken in frequent large doses without bad effect; having given a boy 15 years of age half-drachm doses every four hours for three or four days, with the only result of a great benefit in all the symptoms connected with the disease, is, I think, conclusive evidence of its harmlessness.

6. Its good effects are soon apparent, and it does not interfere with the use of other measures of relief, as ice, blisters, etc.

7. The best mode of using the remedy is to administer large doses frequently. For adults begin on doses of 15 grs. repeated every two hours, and increase the dose as may be found necessary to obtain the desired effect, to ℈ij., at intervals of two hours, if need be. When the disease is under control, which will be determined by the reduction in temperature, relief of pain, and placid countenance, decrease the dose, give at longer intervals, but still continue the use of it in small doses as long as the least symptom is present indicative of the disease.

Having never heard nor read of salicylic acid being used in the treatment of cerebro-spinal meningitis, and my good success with its use in this fearful epidemic being afterwards verified by Dr. J. B. Weever, of this place, I hope to induce others to give this remedy a trial, and by so doing I think they will be enabled to see very happy effects from its use, and thereby be highly gratified with the results.

The Tubercle Bacillus.

The question of the diagnostic value of this parasite has assumed such great importance that it behooves us to gather together all valuable opinions on the subject. Dr. G. H. Mackenzie has thrown additional light on the subject in an excellent article in the *Edinburgh Med. Jour.* for February, 1884, which concludes thus:

1. The bacillus of tubercle is pathognomonic of tubercular disease: found in the sputum, it indicates that active tubercular disease is in progress in the lungs, in the larynx, or in both.

2. It is absent in non-phthisical disease, in some cases of chronic (fibroid) phthisis, and during quiescent stages of the disease.

3. It is found in greatest numbers in acute phthisis with fever, softening, and cavity formation, but is also present in fair numbers before consolidation can be detected, especially if the larynx be affected, and it is thus useful in the diagnosis of incipient phthisis.

4. In a given case its numbers vary according to the nature and origin of the pulmonary secretion, and the period of the day at which it is expectorated, as also according to whether it is or is not free from extraneous matter in excess—*e. g.*, gastric secretion, saliva, or blood.

5. Found in the laryngeal secretion on its direct removal, it is a most valuable aid in the diagnosis of laryngeal tuberculosis.

6. In hemorrhage from the lungs, the presence or absence of tubercle bacilli in the hemorrhagic fluid has a most material influence on the prognosis.

7. Negative results in important or dubious cases cannot be held as conclusive unless examinations by different methods have been made on at least three different occasions.

8. Whilst its diagnostic value is thus of a very high standard, indicating the existence of tubercular disease, its prognostic value cannot be determined with accuracy, inasmuch as it may be as abundant in a comparatively slow non-febrile case as it is in a more acute and febrile one.

Pre-Fœtal Dilatation of Vulva to Save the Perineum.

Prof. Dumas, in the *Montpellier Médicale*, criticises the various methods of supporting the perineum, and comes to the conclusion that none of

them are either scientific or satisfactory. With Dr. Duke's method of stretching the perineum during the pains (*Brit. Med. Jour.*, 10th March, 1883), he expresses himself as not satisfied, and states that he believes such interference may occasionally lead to the occurrence of the accident it was designed to prevent. He draws attention to several cases of primiparæ noticed by him, where the vulva became quickly dilated, while the time taken for the head to reach the vulva had been long; and this he explains by the presence of a voluminous caput succedaneum in such cases, which leads to dilatation of the vulva while the head is still engaged dilating and passing through the vagina. The procedure he recommends, and which he designates "præ-fœtal dilatation of the vulva," consists in introducing two or more fingers and the thumb of the right hand into the vagina, and fitting the hand on to the head, not exerting any force on the approaching head, but rather allowing it to push the hand in front of it, and thus take the place of the caput in such cases as he describes.

Sudden Dislocations During Acute Rheumatism.

The *Dublin Jour. Med. Sci.* for December, 1883, says: In the course of a case of acute rheumatism, articulations in a bad position may suddenly become dislocated without bony alteration, and without suppuration. These luxations can be reduced instantaneously like traumatic dislocations, and the limb regains its natural appearance. M. Verneuil recently communicated to the *Société de Chirurgie* (*Gaz. Hebdom.*, 9 Nov., 1883), seven cases in which he observed this form of dislocation. At the present time such dislocations are attributed to hydrarthrosis. M. Verneuil does not deny that they may be due to hydrarthrosis, but he has never determined its existence. In two cases of luxation of the knee there was no fluid present. The muscular system plays a very important part in the production of luxations—paralysis existing in one group of muscles and contraction in another muscular group. It is important, therefore, to be on the watch for faulty positions of the joints in rheumatism. The reduction of these dislocations is easy, and subsequently the limb resumes its normal form and functions.

Common Salt in Pleuritic Effusions.

Dr. Tom Robinson, in the *British Medical Journal*, of December 22, 1883, relates a case of pleurisy with effusion, accompanied with "cold clamminess of hands and brow, and breathing 51 times in a minute, the pulse barely appreciable at the wrist, and the heart pushed over to the right." He was ordered a teaspoonful of common salt dissolved in a wineglassful of water every hour, at the same time sweating by a hot wet flannel and a piece of waterproof sheeting. At the same time two ounces of the common black draught were administered, and all fluids were stopped. Two hours afterwards "he had most markedly improved in every way," his respiration being 48 per minute. In ten hours "he could lie on either side and get well down in bed." Next day there was no embarrassment of breathing, and all his subjective symptoms had disappeared. He was now given one drachm of common salt twice a day, with good nourishing food, and in a week he was up and out of doors.

Glycerine after Bathing.

Like the ancient Romans, D. S. Troy, of Montgomery, Ala. (*Popular Science News*), has taken to using glycerine after bathing, with most happy results. He puts one drop of attar of roses in two ounces of glycerine, and rubs the body after bathing. The result was charming: it left the skin soft, with all of its functions in as full operation as before the bathing, and with a delicious sensation of perfect cleanliness. He has been using it for four or five years regularly, leading a life more sedentary than ever, and it seems to supply to the skin a vigor similar to that resulting from muscular exercise. It has been of great benefit to his general health and personal comfort. No care is required in rubbing it on, except to see that it is applied to all the skin except the face, and particularly to the soles of the feet. If any remains after the rubbing, it can be readily wiped off with a towel.

Iodide of Potassium in Syphilis.

In the course of a lecture on the treatment of syphilis, published in the *Med. News*, Prof. Dujardin-Beaumetz says:

Whenever you give iodide of potassium in massive doses, do not forget that you must prescribe at the same time the milk diet. Milk, in favoring the elimination by the urine of the iodine, and in preventing the irritant action of this salt on the digestive tube, antagonizes the baneful effects of this medication. The solution which I advise you to use is the following:

℞. Iodide of potassium, 225 grs.
Water, 8½ f℥.
M.

Each tablespoonful of this solution contains

about one gramme (fifteen grains) of iodide of potassium.

You should commence with small doses, and when the iodic coryza appears, discontinue for several days the use of the medicine, to resume it in larger doses. The economy in fact habituates itself to the iodide; and persons who, at the commencement of treatment, suffer from irritations of the mucous membranes as a result of small doses, a little later may bear without inconvenience much larger doses of this medicine.

Nitrite of Amyl in Pneumonia.

From *La France Méd.* we note that Prof. Silvestrini has been using nitrite of amyl in pneumonia, and he thus formulates his conclusions:

1. In the pre-organic stage of pneumonia, the nitrite of amyl may be of prompt and effective service.

2. One may repeat with impunity the inhalation of this remedy during several successive days, and in doses relatively enormous. (He has administered as much as 50 grammes of the nitrite in five days, the inhalation being carried on for five minutes every half hour.)

3. In cases which have a fatal issue, whether from extension of the pneumonia, or from complications, these inhalations may retard death.

To Hasten the Anæsthetic Action of the Ether Spray.

From the *Revue Méd.* we learn that a little device, first indicated by Dr. Letamendi, of Barcelona, is employed by Dr. Vidal to shorten the duration of the process of congelation. It consists in making a slight prick with a needle at the point upon which the spray is directed, at the moment when the skin assumes a purplish hue, and when the ether commencing to solidify assumes an oily consistency. The little puncture made at this time excites a reflex constrictive action of the vaso-motor nerves, the blood is driven from the part, and the skin becomes white. Another method of hastening the process consists in placing little wads of lint about the part, thus increasing the surface of evaporation.

Ether vs. Chloroform as an Anæsthetic.

Dr. J. W. Parkinson concludes an elaborate article on this subject in the *Pacific M. and S. Journal* as follows:

1. That ether is as efficient an anæsthetic as chloroform. 2. That there are fewer cases in which its use is contra-indicated. 3. That it is a safer anæsthetic in the hands of the most experienced, and by inference corresponding in an increased ratio with those more or less unskilled. 4. That the use of chloroform with our present knowledge and experience, in preference to ether, where no contra-indication to the latter can be shown, is adding materially to the risk of the patient and the responsibility of the administrator.

A Ready Caustic.

From the *Jour. de Med. de Brux.* we learn that Dr. Moser recently presented to the Paris Academy of Medicine a little invention of his which he called the *crayon-feu*, for ready use in the application of the actual cautery to poisoned wounds from the bites of venomous snakes, mad dogs, etc. It consisted in a little cylinder with sharpened extremity, enclosed in a case which also contained matches for lighting it. The composition of the stick is as follows: Powdered charcoal, 30 grams; nitrate of potassium, 4 grams; iron powder, 5 grams; benzoin, 1 gram; agglutinating powder, q. s. To be made into forty crayons. These sticks are hard and burn readily, and for a sufficient time to cauterize the wound.

Death from Heart Rupture.

Mr. Baldwin relates a case in the *Brit. Med. Jour.*, January 5, 1884:

At the post-mortem examination, all organs were healthy. The pericardium was bulging, and, on section, was found to be filled with clots. The left ventricle was ruptured at the apex to the extent of nearly two inches; and above, to the extent of three-fourths of an inch. The aorta and valves were healthy; the mitral were slightly fringed with old vegetations. A huge clot filled the apical rupture, and in the heart, around the columnæ carneæ, some ante-mortem clots were found; the ventricular walls being thin at the seat of rupture. The patient had, eight months previously, lost a son from aneurism of the third part of the aorta; he had no other symptoms than persistent pain in the left mammary region, and in the neck.

A Tonic Pill.

The following formula is highly recommended in the *Med. Press and Circular*:

Reduced iron,	1 gr.
Ext. cinchona,	4 grs.
Arsenious acid,	$\frac{1}{10}$ gr.
Ext. nux vomica,	$\frac{1}{2}$ gr.
Gentian,	q. s.

For one pill. One three times a day.

Syrup of Coffee to Disguise Quinine.

Syrup of yerba santa has been satisfactorily used for this purpose, but now we note the following in *New Remedies:* Roasted coffee finely ground four ounces, alcohol one ounce, sugar twelve ounces, boiling water sufficient. Pack the coffee firmly in a percolator provided with a cover, and pour on boiling water until eight fluid ounces of percolate are obtained. Then dissolve the sugar (in the percolate) by percolation, and finally add the alcohol as a preservative. The taste of two grains of quinine is said to be pretty well covered by a drachm of syrup.

Phenic Acid in Yellow Fever.

Dr. de Lacaille, of Rio de Janeiro, professes to have cured thirty-eight consecutive cases of yellow fever by the use of Déclat's preparations of phenic and sulpho-phenic acids, and in grave cases, the phenate of ammonium. In the early stages he gives the remedies by the mouth, but in the advanced stages the hypodermic method is necessary. He contrasts very favorably his recent experience with his former sad failures without these drugs.

A Reliable Tæniafuge.

℞.	Extracti filicis maris,	ʒ iss.
	Pulveris kamalæ,	ʒ ij.
	Mucilaginis acaciæ,	
	Syrupi simplicis,	aa ʒ ij.
	Aquæ cinnamomi,	ad ʒ iij.

M. S.—Half to be taken at bed time, and the other half early in the morning.

Mr. J. B. Lawson reports good results from this in the *Glasgow Med. Jour.*, January, 1884.

Special Report.

NO. XVI.—OPHTHALMOLOGY.

BY C. S. TURNBULL, M. D.,

Oculist to the German Hospital, Philadelphia.

Ophthalmia in the Expeditionary Force of Egypt. Med. Times, October 14, p. 447.

During the last campaign in Egypt 60 men per day became affected with ophthalmia. Oculists should accompany an army during such a campaign.

The Etiology of Hydrophthalmus. Centralb. f. Prakt. Augenheilk, August, 1882.

Mayerhausen saw hydrophthalmus develop during dentition under the symptoms of acute glaucoma. Eserine proved very efficient.

Parrot observed *Mydriasis during Coma* in fifteen cases of chronic infantile affections of the brain, as soon as he pinched the skin more severely. (Rev. de Méd de Paris, October, 1882.

Minor. *Duboisine for Photophobia.* Virginia Med. Monthly, September, 1882.

Photophobia in keratitis disappeared very rapidly when duboisine was used, but not after atropine.

The Effect of Direct Sunlight upon the Retina. Arch. f. Ophth., vol. xxxiii., 3.

Deutschmann has found that direct sunlight produces changes in the retina similar to those of disseminated choroiditis. The retina is converted into a more or less structureless mass, the albumen being coagulated. Regeneration does not take place. The blood-vessels of the choroid in the region affected are widely distended, and small hemorrhages and little round nodules enclosed in spindle-cells are found.

Investigations on the Visual Perception of the Newborn. Halle, 1882.

Genzmer thus describes the development of sight in the new-born: The eyes are sensitive to light immediately after birth, and the pupils react promptly. When a strong light suddenly falls upon them, they converge. A new-born child cannot follow an object with the eyes, but can fix upon it when in the line of vision. Perhaps this can be explained by an insufficient development of the optic tracts. The conclusion also follows that, at first, the child only has impressions of light and dark, which are mainly transmitted from the macula lutea. Convergence for the purpose of fixation was not observed until the fourth week. An energetic contraction of the ciliary muscle was observed with the ophthalmoscope in a child two weeks old, when convergence had been produced by strong light; this shows that there must be a pre-formed connection between convergence and accommodation. Colors are not noticed the first few months; white objects first attract the child's attention, no attention being paid to colored. The color sense begins to develop in the fourth month, red being recognized first, though white still takes precedence. It therefore follows that the new-born child is more affected by the quantity than the quality of light.

The Influence of the External and the Middle Ear on the Senses, especially Sight. Wiener Med. Blätter, No. 45.

Urbantschitsch has found that the perception of light is diminished by an affection of the ear; when the latter improves, vision also improves. He thinks it is a reflex action of the fifth nerve.

Aglave believes there are connecting fibres between the centres of hearing and color and perception. *De l'Audition des Couleurs.* Rec'd Ophth., No. 9, September, 1882.

The Good Results of Educating the Color Sense. Centralbl. f. Prakt. Augenheilk., December, 1882.

According to Kroll, 0.3 per cent. of the men in Crefeld and its surroundings, are red-green-blind, a fact which he explains by their occupation, silk weaving having been practiced for two hundred years, which had developed the color sense of the male population. By educating the color sense in the schools a similar result might be obtained for the population of the whole country. He therefore favors a plan looking to this in all the schools.

Myopia in the Trans-Caucasian Female Seminary, the Tiflis Military School, the "Zunker" School, and Artificial Illumination in the Classes and Dormitories. Medicinsky Sbornik d. Kaukas. Med. Ges., 1882, No. 34.

Reich's results were as follows: In the lowest class of the school for girls there was 12 per cent. of myopia; in the highest, 53 per cent., the average being 33 per cent. The development of myopia was due to the poor illumination in the lowest classes. In the three classes of the infantry school there are 52 myopes among 292 scholars. The ratio of the square surface of window to that of the floor was 1.12 and 1.16. The illumination at night was very poor. The majority of the myopes were Armenians.

Hysterical Ptosis. Ophth. Rev., December, 1882, p. 404.

Snell observed a case of hysterical ptosis in a girl about twelve years old, who had been menstruating for six months rather freely. She made a good recovery.

Stretching the Infra-Orbital Nerve for Chronic Cyclitis, etc. Ann. d'Ocul., 1882, vol. lxxxviii., p. 241.

Badal stretched the infra-orbital nerve, and excised a portion of it in three patients with good results. The affections thus treated were neuralgia of the trigeminus, chronic cyclitis combined with phthisis of the globe, and pains in chronic glaucoma (amaurosis). In the first case the infra-orbital nerve had previously been stretched with moderate success; in the second, peritomy had failed; and in the third, a broad iridectomy had proved of no avail.

Tearing the Supra-Orbital Nerve for Neuralgia. Soc. de Chir., Seance du 29 Nov., et 6 Dec., 1882. Gaz. d'Ophth., 1883, No. 1.

Blum hit upon this method by accident, as the supra-orbital nerve tore while being stretched, the indication being neuralgia, lasting for fifteen years.

Traumatic Aneurism of the Orbit. Brit. Med. Jour., November, 1882, p. 1042.

Glascott observed a case of traumatic aneurism of the orbit producing exophthalmus. Patient derived great benefit from intermittent compression of the left carotid artery. The exophthalmus was reduced, and there was a cessation of whizzing in the head, and the infra-orbital bruit de souffle disappeared. He also observed a case of aneurism of the orbit, which had existed for some time, which was cured spontaneously during an attack of phlegmonous inflammation of the face and head.

A Case of Intra-orbital Aneurism following Fracture of the Base of the Skull and Meningitis. The Lancet, November 11, 1882, No. 19, p. 799.

Lloyd observed a case of intra-orbital aneurism in a woman of twenty-nine, who had been thrown from a wagon, and had sustained a fracture of the base of the skull. Meningitis ensued, and in about six weeks the left eye began to become prominent and sight to fail. Ligation of the common carotid artery checked the growth of the aneurism for a time, but six months later, the eye being still prominent, it was removed on account of the pain; vision had been lost.

Contribuzoine Allo Studio dei Tumori Vascolari del l'Orbita. Giorn. d. R. Acad. d' Med., d' Torino, 1882, Nos. 5 and 6.

Gallenga describes a curious case of unilateral exophthalmus observed at Raymond's clinic. The disease had begun with a marked swelling of the lids of the left eye about six years ago without any assignable cause. A year later, the globe, whose tension had increased a little, became slightly prominent, which gradually increased until finally it became at times a perfect hernia of the globe, the plane of the aperture of the lids falling behind the equator of the eye. The eye generally protrudes, and is turned downward and outward, but covered by the lid. Compression forces the globe back as upon a soft cushion; this is still more the case where the patient lies on his back and the carotid is compressed. When the pressure ceases, the globe springs back beyond, on the margin of the lid, and then gradually returns to its former position. The dislocation of the globe also easily takes place when the head is bent forward and the patient breathes out. Vision was gradually lost, and there is now atrophy of the optic nerve. The diagnosis of cavernous angioma was made on account of the slow devel-

opment, the absence of pulsation, the presence of a faint blowing sound, and especially on account of the power to replace the dislocated globe.

Further Investigations on Trachoma, and Remarks on the Origin of Blenorrhœa of the New-born and its Treatment. Ber. über d. xiv., Versamml., d'Ophth. Gesellsch. zu Heidelberg, 1882, p. 45.

Sattler has repeated his already-published investigations on the development of trachoma through the agency of micrococci with special reference to Koch's method of breeding them. The culture and inoculation were completely successful, so that these results corroborate the former ones in every respect. As regards the morphology of the micro-organisms, they never assume the shape of chains or form large zoöglœa masses, but are either in small groups, single or double, though when fully developed the separate elements never come into immediate contact, but are always separated by a small interstice. One of the principal characteristics is the extensive subdivision of the trachoma nodule. The trachoma micrococci were bred through several generations. Sattler inoculated the human conjunctiva with micrococci of the third generation, which were purely bred. An eruption of trachoma granules followed, taking a mild chronic course. Only the micrococci of trachoma produce similar granules on the conjunctiva, while other micro-organisms introduced and rubbed into the conjunctival sac, produced no changes.

(*To be Continued.*)

CORRESPONDENCE.

A Word of Protest.

EDS. MED. AND SURG. REPORTER :—

Dr. Hiram Corson's article on "Blood-letting in the Young," published in your journal of February 2, contains one reckless expression, which seems to me to call for a word or two of protest. As Dr. C. is a physician of experience and standing, his utterances must command attention. Let him be most careful, therefore, to utter no word which may lead a hearer into difficulty.

He has seen fit to pooh-pooh some of the well-ascertained sources of danger that threaten us in our battle with disease. For instance, he does not see how a bubble of air carried along the jugular vein to the heart can cause death ; indeed, he does not believe it can. As to how death is brought about in such a case, he is not more ignorant than the rest of us, but that the introduction of air into the organs of circulation may be followed by most alarming symptoms and even death, is a fact long known to our science. Mention is made of it in medical literature of earlier date than the middle of the last century. As an element of risk in surgical operations, Dupuytren made it a subject of special study, and, since his day, a large number of cases have been put upon record, showing a most remarkable uniformity of symptoms and of post-mortem appearances.

Thirty-five years ago the symptoms of this accident were so well known that Mr. Syme told a jury of inquest that an autopsy was not necessary in order to prove that death had been due to the entrance of air into the anterior jugular vein, through a wound made by a seton needle (A mere puncture was made. The seton was not introduced.)

Death has followed the admission of air into the jugular vein, into the axillary, into the subclavian, into the sub-scapular, and into veins of so little anatomical importance as to be unnamed in the records. Effects more or less alarming have been observed to follow the entrance of air into the veins named above, and into the saphena and facial also.

From experiments on the lower animals, it has been learned that the presence of air in the portal circulation is attended with no untoward effects. In all other situations the effects are proportional to the quantity of air admitted and the rapidity of its introduction. Bretonneau caused death to ensue in half a minute by the forcible introduction of a very small amount of air, accidentally allowed to remain in the syringe with which he was about to inject some pus into the jugular of a dog. Not a drop of pus escaped from the syringe. Experience and experiment show that air may gain entrance into wounded veins which are not kept patulous by any anatomical or pathological condition. Cardiac diastole favors a condition of vacuum in the venous system, as does also the act of inspiration.

Enough has been said, I think, to show that this contingency, though somewhat remote, is quite near enough to merit consideration among the risks of venesection. A sufficient quantity of air to cause death may enter in so short a time, the effects follow with such appalling rapidity, and remedial measures are, so far as my knowledge goes, of such untried value, that it seems to me that no man without this forewarning should, at this day, be licensed to puncture veins. I am aware that this subject is scarcely ever alluded to in lecture courses, and quite as seldom in text-books. This is a serious oversight. One would rather remain ignorant than learn this lesson from experience, whose teachings are so unforgetable and whose fees are so ruinous. Luckily, preventive measures are always effectual, at least in venesection. Still it is well to remember that he who is often surprised, may be sometimes demoralized.

JOHN S. FULTON, M. D.

Lakesville, Md., February 12, 1884.

—It appears that the suggestion of General Howard to "brand" deserters, which has excited so much indignation on the part of the public press, was totally misapprehended. The recommendation actually made was that after a first offense a distinctive mark should be tattooed (not branded) into the skin at some part covered with clothing, so that the offender should not be allowed to reënlist.

News and Miscellany.

The Bahama Islands for Consumptives.

A correspondent of the *Cinn. Lan. and Clin.* thus writes: The Bahamas are superior to any winter resort of the western hemisphere for pulmonary troubles. I presume they are not surpassed in the world, except by the Madeiras, and not even by them in the winter—only during other seasons of the year. Any consumptive, in its incipient stage, coming and *remaining* here for two or three *full* winters will assuredly get well. A patient in the *second* stage stands precisely an even chance of living or dying, while one in the *third* stage had better, of course, remain at home to die amongst his friends. The climate is equally as efficacious for nervous disorders, and *very* good for chronic Bright's Disease. It is not adapted to rheumatic affections but for other chronic maladies, chronic nerve disorders and albuminuria, it is, as before stated, unsurpassed. Of course, it is often difficult to induce patients to come here sufficiently early in the season, to remain here late enough in the spring, or to stay here at all. But that does not militate against the fact that the climate will do almost everything for them if they will be but contented to stay. I advise my patients to remain here till late in March or early April, and then not go home directly, where even at such late date there may still be experienced the rigors of winter. Rather, I recommend them to go to Florida or the Carolinas and work their way gradually northward, reaching the latitude of Cincinnati, perhaps, about the middle of May. The good that a patient has derived from a season here is often obliterated by a sudden transition from Nassau to New York, or some other city situated, perhaps, between 35° and 50° north latitude. In all the Bahamas the climate is, perhaps, equally favorable; but New Providence is usually chosen because it possesses the capital (Nassau) of the group, and because all the comforts of life may be readily and cheaply obtained here. The outlying islands possess so few comforts that an invalid requires, that he must be well enough to "rough it" somewhat ere he attempts to make them his residence.

Here (Nassau) we have the best hotel in all the West Indies, and also a number of excellent boarding houses, where every comfort may be obtained, in the latter at the rate of $12 to $15 per week, and at the hotel at about $3 per day.

British Medical Association.

The fifty-second annual meeting will be held July 29, 30, and 31, and August 1, 1884, at Belfast, under the presidency of James Cuming, M. A., M. D., F. K. Q. C. P. I., Professor of Medicine, Queen's College, Belfast. The Address in Medicine will be delivered by Sir Andrew Clark, Bart, M. D., F. R. C. P., Physician and Lecturer on Clinical Medicine, London Hospital. The address in Obstetric Medicine will be delivered by George H. Kidd, M. D., F. R. C. S. I., Master of the Coombe Lying-in Hospital, Dublin. The Address in Physiology will be delivered by Peter Redfern, M. D., F. R. C. S., Professor of Anatomy and Physiology, Queen's College, Belfast.

Communications in reference to the meeting of the British Medical Association at Belfast, should be addressed to the Hon. Local Secretaries, John Moore, M. D.; Alexdander Dempsey, M. D.; John W. Byers, M. A., M. D.

Visitors going from America to attend this meeting can travel by any of the following routes:

1. A "Cunard" steamer will leave (*a*) New York on Wednesday, July 16, arriving in Queenstown about the following Thursday week, July 24. (*b*) Boston on Saturday, July 19, reaching Queenstown the following Monday week, July 28.
2. A "White Star" steamer will leave New York on Saturday, July 12, and on Saturday, July 19; due at Queenstown about July 20 and July 27.
3. An "Inman" steamer will leave New York on Tuesday, July 15; due at Queenstown about July 23.
4. An "Allan" steamer will leave Quebec on Saturday, July 19, arriving in Londonderry about the 26th or 28th of July.
5. An "Anchor" steamer will leave New York on Saturday, July 19; due at Londonderry on July 29.

Londonderry is ninety-five miles from Belfast, and trains run daily between the two places.

The route from Queenstown to Belfast is from Queenstown to Cork, Cork to Dublin (one hundred and sixty-five miles by train), and Dublin to Belfast (one hundred and thirteen miles).

Carbonic Acid and the Devil.

In the *Popular Science News* we read that when Friedrich Hoffmann discovered carbonic acid gas, and traced its effects on animal life, he was denounced by more than one German university as hostile to religion, and verging toward atheism. Three or four students at the University of Jena, in the attempt to raise a spirit for the discovery of a supposed hidden treasure, were strangled or poisoned by the fumes of the charcoal they had been burning in a close garden-house of a vineyard near Jena, while employed in their magic fumigations and charms. Only one was restored to life, and, from his account of the noises and spectres in his ears and eyes as he was losing his senses, it was taken for granted that the bad spirit had destroyed them. Hoffmann admitted that it was a very bad spirit that had tempted them, the spirit of avarice and folly; and that a very noxious spirit—gas, or *geist*—was the immediate cause of their death. But he contended that this latter spirit was the spirit of charcoal, which would have produced the same effect had the young men been chanting psalms instead of incantations; and acquitted the devil of all direct concern in the business. The theological faculty took alarm; even physicians pretended to be horror-stricken at such audacity.

The Cholera Germ.

News from Berlin, dated February 19, states that the German Sanitary Commission which was sent out to Egypt by the Imperial Board of Health to study the nature and causes, etc., of cholera, and which, after finishing its labors at Alexandria, was ordered to continue its investigations in India, has just forwarded a report from Calcutta where it arrived some two or

three months ago. The Commission discovered the cholera germ in a water-tank at Calcutta, and found in the suburban village, where the cholera appeared, the same microscopic organism which had been discovered in the lower intestines of cholera victims in Egypt.

International Medical Congress.

The meetings of this Congress will begin at Copenhagen on August 10. A steamer will leave Hull (England) on August 2 and 9 for Copenhagen; and on August 5 a steamer will leave Leith (Scotland) for Copenhagen. Both these places (Hull and Leith) can be reached on any day by leaving Belfast on the previous evening by the cross-channel steamers. Visitors, after attending the meeting of the British Medical Association in Belfast, will have ample time to travel to Copenhagen for the Congress.

St. Louis Medical Society.

The following gentlemen have been elected officers of the St. Louis Medical Society for the year 1884:

President—G. F. Dudley, M. D.
Vice-President—Le Grand Atwood, M. D.
Treasurer—W. E. Fischel, M. D.
Recording Secretary—H. Hodgen, M. D.
Corresponding Secretary—G. Hurt, M. D.

First Advocate of the Germ Theory.

An esteemed correspondent claims that Prof. Rezin Thompson, of Nashville, was the first advocate of the germ theory in disease. Dr. Thompson died old, poor, and childless some twenty years ago; and if any of our Tennessee subscribers can supply us with particulars of his life and doctrines on this point, other than those contained in his published works, we shall be glad to receive them.

Statistics of a City.

Calling the population of Providence, R. I., 119,405 in 1883, the proportions of births, marriages and deaths to population in that year were as follows:

Births,	1 in 40.85, or 24.48 in each 1,000
Persons married,	1 in 50.76, or 19.69 in each 1,000
Deaths,	1 in 51.29, or 19.50 in each 1,000

Philadelphia Dental College.

The twenty-first annual commencement of the Philadelphia Dental College took place at the Academy of Music on Friday, February 29. The address to the graduates was delivered by Prof. S. H. Guilford, and the valedictory by Edgar L. Gardiner. There were sixty-five graduates.

Items.

—The Philadelphia Clinical Society admits women to membership.

—Dr. H. H. Williams, of Johnstown, Pa., reports, in the *Medical Record*, a case of a man with three testicles.

—James H. Frey, wholesale druggist of Baltimore, Md., left in his will about $60,000 to various religious and charitable institutions.

—Dr. Henry L. Sabin, for fifty-six years in practice at Williamstown, Mass., and the oldest trustee of Williams College, died in that town February 25, aged eighty-three years.

—On the occasion of the fourteenth annual dinner of Bowdoin College Alumni Association of New York, held at Delmonico's February 14th, Dr. Fordyce Barker was re-elected President.

—An amendment to the By-Laws of the Philadelphia County Medical Society has been introduced, and will be acted on in April, which provides that the members of the Society shall be regular *male* physicians.

—Dr. Lesnewich reports, in the *Paris Médical*, the case of a male infant, aged ten months, that secretes milk in considerable amount. The infant has, for its size, well developed mammary glands.

—One day Prince Bismarck, walking in a park, stood for a few minutes on an ant's nest. Hurrying home, he reported that he believed he had a bad case of trichinosis—he could feel the horrible things crawling through his system.

—"I have no objections," said a Chicago alderman, gravely, in speaking of the proposition to tax the druggists of the city $500 per annum each; "I have no objections to druggists selling without a license on the *subscription* of a physician."

—Of vivisection Pasteur says: "Never should I have the courage to kill a bird for sport, but when it comes to experiments I have never been troubled by the slightest scruple. Science in that case has the right of pleading the sovereignty of the purpose."

—A new antiseptic termed "antibacterid," recently patented in Germany, consists of a solution of 338 parts of borax, and 198 parts glucose, in a minimum quantity of water. To this solution is added 124 parts of boracic acid, and the mixture is evaporated until solid.

—The Trustees of the College of Physicians and Surgeons, of New York, have elected Dr. John C. Dalton, for so many years Professor of Physiology, President of the College, in place of Dr. Alonzo Clark, who has resigned. Dr. John G. Curtis now holds the chair of Physiology.

—A *Lancet* correspondent quotes from the *Hygiene Pratique* that boots and shoes may be rendered water-proof by soaking them for some hours in thick soap-water. The compound penetrates the leather, and there forms a fatty acid which renders it impervious to water.

—It is said that Berlin has one drug store to every 16,266 inhabitants; Breslau, one to every 13,000, and Cologne, one to every 11,000. Compare these ratios with that of Chicago, where the proportion is one drug store to about every 1,500 inhabitants, and with St. Louis, Milwaukee, Detroit, Cincinnati, and other Western cities, where, we believe, the ratio is still larger.

—First Country Doctor: "Could you come to my place, Brown, to-morrow morning?"

Second C. D.: "All right, old man. What is it?"

First C. D.: "Well, I've had a case of endocarditis which I've very successfully treated with *convallaria majalis*, and I want your help with the post-mortem."—*Punch.*